SUSTAINABLE FOREST MANAGEMENT PLAN 4

2005 ANNUAL REPORT

TFL 48

FINAL

Canadian Forest Products Ltd.

BCTS
BC Timber Sales
Peace-Liard

Canadian Forest Products Ltd.
Chetwynd Division
PO Box 180
Chetwynd, BC V0C 1J0

Version 1.1

August 31, 2006

SUSTAINABLE FOREST MANAGEMENT PLAN 4

2005 ANNUAL REPORT

Canadian Forest Products Ltd.

Chetwynd Operations — TFL 48

Prepared by:

Don Rosen
Forest Inventory Specialist

EXECUTIVE SUMMARY

The following table summarizes suggested revisions or significant progress to indicators in the 2005 Annual Report:

Indicator	Synopsis of Significant Revisions, Progress or Methodology
8 – Shrubs/Early Forest (Sec 2.8)	New indicator and target are proposed based on audit comments to manage shrubs by Natural Disturbance Units versus Landscape Units.
36 – Visual Sensitivity Class (Sec 2.36)	This indicator contains an error in terminology and should refer to Visual Quality Objective rather than the Visual Sensitivity Class. Recommend that the reference to Visual Sensitivity Class (VSC) be changed to Visual Quality Objective (VQO) in both indicator and target statements.
47 – LRMP Implementation Meetings Attended by Canfor (Sec 2.47)	Revision to indicator and target are proposed to include BCTS in the commitment to attend LRMP meetings and to provide input on activities occurring within the DFA.

ACKNOWLEDGEMENTS

We would like to thank Barb Eddy for her hard work in compiling the document and the Chetwynd Woodlands staff and BC Timber Sales (Dawson Creek) staff for compiling data.

We would like to thank the Public Advisory Committee members and advisors for their continued input to the Sustainable Forest Management process and providing input on the draft document.

Table of Contents

List of Tables

List of Figures

1 INTRODUCTION & OVERVIEW

Canadian Forest Products Ltd. (Canfor) achieved registration under the Canadian Standards Association CAN/CSA Z809-96 Sustainable Forest Management System for Tree Farm Licence (TFL) 48's (see Figure 1) forestry operations in July 2000, and re-registration in 2002. In 2005 the Sustainable Forest Management Plan 4 was updated to the CAN/CSA Z809-02 Sustainable Forest Management: Requirements and Guidance. In partial fulfillment of achieving registration, a public group — the Chetwynd Public Advisory Committee (PAC) — was formed at the beginning of 2000 to help Canfor identify quantifiable local-level values, objectives indicators and targets for sustainable forest management. The original indicators and targets identified by the PAC were detailed with associated forest management practices to achieve those targets in the Draft Sustainable Forest Management Plan for Tree Farm Licence 48 (Canfor 2005). The 2005 Annual Report is a summary report on the status of each indicator and provides revisions to several indicators, targets, or the way they are measured. The 2005 Annual Report is the sixth time annual reporting has been undertaken for SFMP's and the first for SFMP 4.

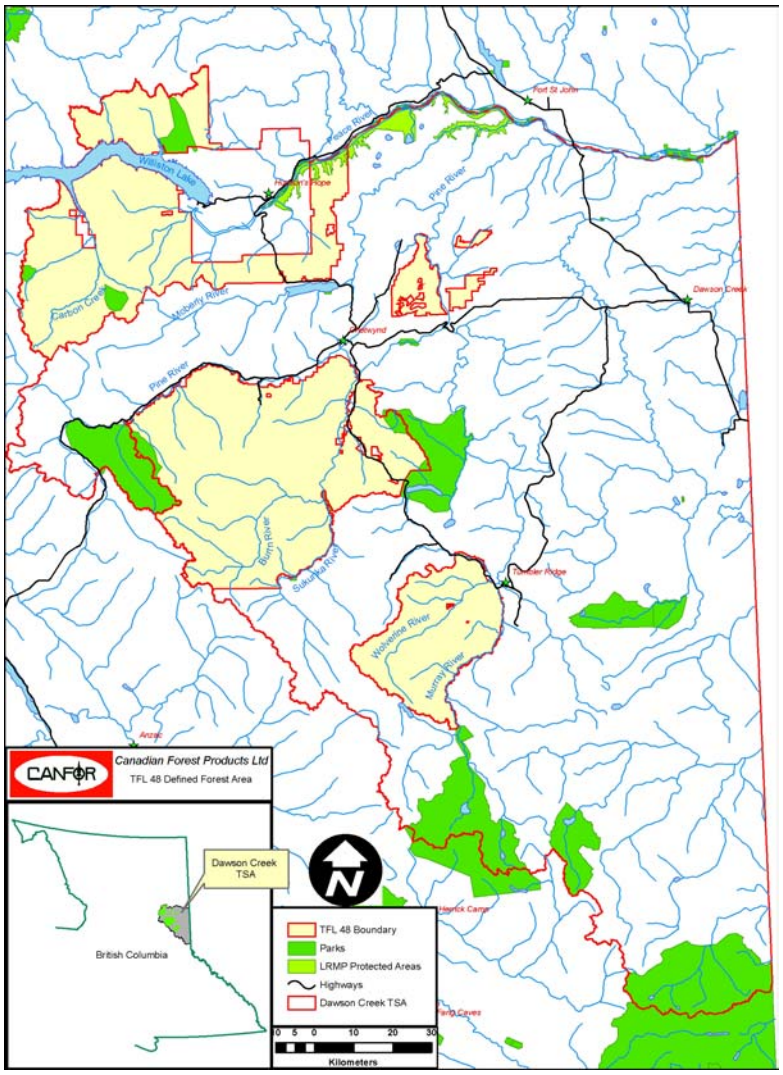

Figure 1: Tree Farm Licence 48

This report is prepared as an annual report required by the CSA standard and also serves as a TFL Annual Report. In this report, each Indicator is reiterated, and a brief status report is provided. For additional information on the Indicators and Objectives, or the practices involved, the reader should refer to Canfor's Draft Sustainable Forest Management Plan 4 for Tree Farm Licence 48 (Canfor, 2005).

1.1 OVERVIEW

The format of the remainder of this document and the detailed status of each indicator are provided below. *This document is subject to review by the Public Advisory Committee (PAC).*

Information noted as SBFEP was collected and provided by BC Timber Sales staff at the Dawson Creek office of the Peace Forest District. Canfor then included this information into applicable indicator reporting. No new information was provided by Louisiana-Pacific as no activities occurred on the TFL in 2005.

1.2 SIGNIFICANT CHANGES

A significant development in the management of TFL 48 is the agreement in principle between BC Timber Sales and Canfor to pursue a joint certification to the CAN/CSA Z809-02 standard for TFL 48. Some of the changes to indicators and reporting in this annual report reflect this new direction.

1.3 TRANSITION FROM MP 3

During our registration audit for the Draft SFMP 4 it was determined that those indicators that were discontinued during the transition from MP 3 to SFMP 4 did not have their status reported for the 2004 season. As previously discussed with the PAC Canfor did not produce a separate annual report as the current status and performance on the indicators in the 2005 Draft SFMP captured this. To correct this oversight the 2004 status of discontinued indicators is included as an appendix to the 2005 Annual Report.

2 SFM INDICATORS AND OBJECTIVES

2.1 ECOSYSTEM REPRESENTATION

Indicator Statement	Target Statement
Proportion of rare ecosystem groups (3, 6, 7, 10, 21) reserved from harvest	100% of rare ecosystems reserved from harvest
SFM Objective: We will conserve or restore ecosystem diversity within the natural range of variation within DFA over time. We will conserve genetic diversity of both wildlife and plant species.	

STATUS AND COMMENTS:

As per the SFMP 4 the following blocks were required to be assessed for the presence of rare ecosystems. Only one of the blocks that remained to be assessed had fieldwork completed in 2005 (T4068) and no rare ecosystems were identified. There were no other blocks where rare ecosystems were identified in 2005.

Table 1: Status of Blocks where Rare Ecosystems are to be Confirmed

LICENCE	BLOCK ID	BLOCK STATE	Rare Sites Comments
TFL48	T1001	CAT A APPR	Block not laid out
TFL48	T1002	CAT A APPR	Block not laid out
TFL48	T1005	CAT A APPR	Block not laid out
TFL48	T2031	CAT A APPR	Block not laid out
TFL48	T2034	INFORMATION	Block not laid out
TFL48	T4068	CAT A APPR	Site plan fieldwork confirmed that the rare site was not present on block.
TFL48	T4072	CAT A APPR	Block not laid out
TFL48	T5007	CAT A APPR	Block not laid out

REVISIONS:

No revisions are suggested for this indicator or objective.

2.2 FOREST TYPES

Indicator Statement	Target Statement
Percent distribution of forest type (deciduous, deciduous mixed wood, conifer mixed wood, conifer) >20 years old across DFA	100% of forest type groups will be within the target range (Conifer - 75-85%, Conifer Mixedwood - 4-6%, Deciduous - 9-15%, Deciduous Mixedwood - 2-4%)
SFM Objective: We will conserve or restore ecosystem diversity within the natural range of variation within the DFA over time. We will sustain a natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance and stress. We will sustain the natural range of ecosystem productivity to support naturally occurring species.	

STATUS AND COMMENTS:

This indicator's status was reported in SFMP 4 and will not be reported on again until 2010. The following Table 2 shows the status as reported in SFMP 4.

Table 2: Forest Type Distribution Current and FDP Status and Target Ranges

	Area by Forest Type					
Forest Type	MP 3 %[1]	2005	%	2010	%	Target Range
Coniferous	80%	407,906	80%	413,252	80%	75-85%
Mixed - Coniferous	5%	26,477	5%	26,858	5%	4-6%
Mixed - Deciduous	3%	17,723	3%	17,876	3%	2-4%
Deciduous	12%	62,437	12%	63,394	12%	9-15%
Grand Total		514,543	100%	521,380	100%	

REVISIONS:

No revisions are suggested for this indicator or objective.

2.3 LATE SERAL FOREST

Indicator Statement	Target Statement
The minimum acceptable proportion (%) of late seral forest by Natural Disturbance Unit (NDU) and NDU by BEC	The minimum proportion (%) of late seral forest by NDU and NDU by BEC as shown in (SFMP 4 Table 11)
SFM Objective: We will conserve or restore ecosystem diversity within the natural range of variation within DFA over time. We will conserve genetic diversity of both wildlife and plant species.	

STATUS AND COMMENTS:

There have been no proposed changes to the late seral forests since the last amendment to the TFL Forest Development Plan in 2004. As such the information presented in this annual report has not changed from that reported in the SFMP 4 document. Next reporting will be in association with any new proposed development.

REVISIONS:

No revisions are suggested for this indicator or objective.

[1] MP 3 data is shown as a percent due to a slight change in the way this indicator is reported. The indicator has change to reporting only stands greater than 20 years old and there have been some changes to the area of TFL 48.

Table 3: Current and FDP Status of Late Seral Forest – Deciduous

		Deciduous Seral Age Groups														
		<40				40-100				101+						
NDU	BEC	2005	%	2010	%	2005	%	2010	%	2005	%	Surplus (Deficit)	2010	%	Surplus (Deficit)	Total Forested Area (ha)	101+ Target
Boreal Plains - Deciduous	BWBSmw 1	3,157	8%	5,669	15%	21,403	57%	20,107	53%	13,304	35%	9,517	12,086	32%	8,300	37,863	10%
	BWBSwk 1	207	5%	283	7%	2,994	75%	2,956	74%	779	20%	381	741	19%	343	3,981	10%
	ESSFmv 2	13	3%	11	2%	369	85%	350	80%	53	12%	10	75	17%	31	436	10%
	SBS wk 2		0%		0%	11	28%	11	28%	29	72%	N/A	29	72%	N/A	40	N/A
Boreal Plains - Deciduous Total		3,377	8%	5,964	14%	24,777	59%	23,425	55%	14,165	33%	9,933	12,931	31%	8,699	42,319	10%
Boreal Foothills - Valley - Deciduous	BWBSmw 1	2,456	11%	2,868	13%	11,359	51%	10,673	48%	8,336	38%	6,121	8,611	39%	6,396	22,152	10%
	BWBSwk 1	28	2%	54	4%	1,065	72%	1,064	72%	380	26%	233	355	24%	208	1,473	10%
	BWBSwk 2	247	5%	480	9%	2,240	44%	2,004	39%	2,615	51%	2,105	2,619	51%	2,109	5,103	10%
Boreal Foothills - Valley - Deciduous Total		2,732	10%	3,402	12%	14,664	51%	13,741	48%	11,332	39%	8,459	11,585	40%	8,712	28,728	10%

Table 4: Current and FDP Status of Late Seral Forest – Coniferous

		Coniferous Seral Age Groups																		
		<40				40-100				101-140				141+						
NDU	BEC	2005	%	2010	%	2005	%	2010	%	2005	%	2010	%	2005	%	Surplus (Deficit)	2010	%	Surplus (Deficit)	Total Forested Area (ha)	141+ Target
Boreal Plains - Conifer	BWBSmw 1	7,866	24%	9,168	28%	10,725	33%	9,973	31%	11,820	36%	10,267	32%	2,050	6%	427	3,053	9%	1,430	32,462	5%
	BWBSwk 1	2,315	10%	4,003	17%	6,783	29%	6,022	25%	12,555	53%	10,550	44%	2,117	9%	928	3,195	13%	2,006	23,770	5%
	ESSFmv 2	625	5%	895	7%	2,442	19%	2,021	16%	6,603	51%	6,311	48%	3,344	26%	2,693	3,789	29%	3,138	13,015	5%
	SBS wk 2	3	1%	3	1%	178	89%	178	89%	10	5%	10	5%	10	5%	N/A	10	5%	N/A	201	N/A
Boreal Plains - Conifer Total		10,809	16%	14,069	20%	20,128	29%	18,194	26%	30,989	45%	27,137	39%	7,521	11%	(4,285)	10,047	14%	(1,759)	69,447	17%
Boreal Foothills - Valley - Conifer	BWBSmw 1	4,419	14%	5,226	16%	9,152	29%	8,606	27%	12,338	39%	10,593	33%	5,946	19%	3,716	7,430	23%	5,200	31,855	7%
	BWBSwk 1	655	12%	1,096	20%	1,809	33%	1,646	30%	1,298	24%	946	17%	1,665	31%	1,286	1,739	32%	1,359	5,427	7%
	BWBSwk 2	450	6%	655	9%	3,561	48%	3,528	47%	2,760	37%	2,579	35%	674	9%	153	683	9%	161	7,444	7%
	SBS wk 2	13,090	16%	17,343	21%	26,275	32%	21,550	26%	23,563	28%	21,755	26%	20,190	24%	14,371	22,469	27%	16,651	83,118	7%
Boreal Foothills - Valley - Conifer Total		18,614	15%	24,320	19%	40,797	32%	35,330	28%	39,958	31%	35,874	28%	28,475	22%	(929)	32,320	25%	2,916	127,844	23%
Boreal Foothills - Mountain	ESSFwc 3	2,479	10%	1,960	8%	4,900	20%	4,952	20%	9,827	40%	9,495	39%	7,321	30%	4,868	8,120	33%	5,667	24,527	10%
	ESSFwcp	318	21%	273	18%	427	28%	370	24%	753	49%	778	51%	40	3%	N/A	119	8%	N/A	1,539	N/A
	ESSFwk 2	3,636	14%	4,498	17%	7,314	28%	6,655	25%	9,340	35%	8,848	34%	6,116	23%	3,475	6,405	24%	3,765	26,406	10%
	ESSFmv 2	10,722	10%	11,667	11%	27,240	26%	25,493	24%	31,330	29%	29,578	28%	36,930	35%	26,308	39,485	37%	28,863	106,223	10%
	ESSFmv 4	740	6%	988	8%	5,801	49%	5,155	44%	3,876	33%	4,147	35%	1,320	11%	147	1,448	12%	274	11,738	10%
	ESSFmvp	736	13%	622	11%	1,819	32%	1,678	29%	1,899	33%	1,957	34%	1,255	22%	N/A	1,453	25%	N/A	5,709	N/A
Boreal Foothills - Mountain Total		18,632	11%	20,008	11%	47,502	27%	44,303	25%	57,025	32%	54,801	31%	52,983	30%	(5,144)	57,030	32%	(1,097)	176,141	33%
Omineca - Valley	BWBSmw 1		0%		0%	13	49%	13	49%	14	51%	14	51%		0%	N/A		0%	N/A	27	N/A
	SBS wk 2	683	11%	656	11%	658	11%	471	8%	3,394	55%	3,385	55%	1,441	23%	1,009	1,665	27%	1,233	6,177	7%
Omineca - Valley Total		683	11%	656	11%	672	11%	484	8%	3,408	55%	3,399	55%	1,441	23%	14	1,665	27%	238	6,204	23%
Omineca - Mountain	ESSFmv 2	857	7%	1,282	10%	1,863	14%	1,418	11%	6,498	49%	6,289	48%	3,968	30%	1,727	4,198	32%	1,956	13,186	17%
	ESSFmvp	47	9%	47	8%	108	19%	99	18%	268	48%	277	50%	132	24%	N/A	132	24%	N/A	556	N/A
Omineca - Mountain Total		904	7%	1,329	10%	1,971	14%	1,517	11%	6,766	49%	6,566	48%	4,101	30%	(3,870)	4,330	32%	(3,640)	13,742	58%
Wet Mountain	ESSFwc 3	1,938	6%	2,081	6%	4,290	13%	3,795	12%	5,904	18%	5,980	18%	20,215	62%	12,128	20,490	63%	12,404	32,347	25%
	ESSFwcp	491	11%	491	11%	1,296	28%	1,100	24%	1,724	38%	1,818	40%	1,075	23%	N/A	1,176	26%	N/A	4,586	N/A
	ESSFwk 2	4,064	15%	4,941	19%	4,036	15%	3,215	12%	3,133	12%	3,496	13%	15,006	57%	8,446	14,588	56%	8,028	26,240	25%
	ESSFmv 2	667	4%	831	5%	3,782	23%	3,428	21%	3,382	21%	3,297	20%	8,425	52%	4,361	8,702	54%	4,637	16,257	25%
	ESSFmvp	250	17%	250	17%	620	41%	547	37%	292	19%	322	22%	334	22%	N/A	377	25%	N/A	1,496	N/A
	SBS wk 2	2,254	20%	3,464	30%	3,376	29%	2,517	22%	1,920	17%	1,785	15%	4,006	35%	1,117	3,791	33%	902	11,556	25%
Wet Mountain Total		9,665	10%	12,058	13%	17,400	19%	14,602	16%	16,355	18%	16,698	18%	49,062	53%	(28,623)	49,124	53%	(28,561)	92,482	84%

Source: VRI – 2004 and Current TFL 48 FDP (2004 Major Amendment)

2.4 PATCH SIZE DISTRIBUTION

Indicator Statement	Target Statement
Percent area by Patch Size Class (0-50, 51-100 and >100 ha) by Natural Disturbance Unit (NDU) by early or mature and proportion of mature interior forest condition.	Targets by Patch Size Class by NDU by early or mature are shown in SFMP 4 Table 14
SFM Objective: We will conserve or restore ecosystem diversity within the natural range of variation within DFA over time.	

STATUS AND COMMENTS:

There have been no development changes proposed since the last amendment to the TFL Forest Development Plan in 2004. As such the information presented in this annual report has not changed from that reported in the SFMP 4 document. Next reporting will be in association with any new proposed development.

Table 5: Early Patch Size Class Current and Future Status

NDU	Time Period from 2005 in Decades	Patch Size Class (ha)								Total ha
		<50		51-100			100+			
		ha	%	ha	%	Target	ha	%	Target	
Boreal Plains	0	1,918	16%	749	6%		9,340	78%		12,008
	Post FDP	2,172	10%	1,186	6%		17,888	84%		21,246
	2	3,349	25%	1,487	11%		8,583	64%		13,419
	4	3,823	23%	1,915	11%	<15%	10,918	66%	>50%	16,656
	6	3,425	21%	2,502	15%		10,539	64%		16,466
	8	4,173	29%	1,784	12%		8,498	59%		14,455
	10	4,230	35%	1,505	12%		6,318	52%		12,053
Boreal Foothills/Omineca	0	7,445	22%	6,262	18%		20,489	60%		34,197
	Post FDP	9,236	17%	7,836	14%		37,954	69%		55,027
	2	7,994	23%	5,957	17%		21,372	61%		35,323
	4	11,575	36%	5,573	17%	<20%	14,829	46%	>40%	31,977
	6	10,244	37%	5,738	20%		12,051	43%		28,033
	8	11,041	38%	6,163	21%		11,633	40%		28,836
	10	10,604	30%	5,312	15%		20,001	56%		35,917
Wet Mountain	0	1,222	23%	1,205	23%		2,840	54%		5,267
	Post FDP	3,325	31%	1,464	14%		5,914	55%		10,703
	2	1,298	29%	1,114	25%		1,991	45%		4,402
	4	0	0%	0	0%	<25%	0	0%	<60%	0
	6	770	88%	105	12%			0%		876
	8	449	89%	53	11%			0%		502
	10	836	78%	229	22%			0%		1,065

Table 6: Mature Patch Size Class Current and Future Status

NDU	Time Period from 2005 in Decades	Patch Size Class (ha)										Total ha	Total Interior Forest %	Interior Forest Target %
		<50			51-100			100+						
		ha	%	Int%	ha	%	Int%	ha	%	Target	Int%			
Boreal Plains	0	6,782	12%	6%	1,948	3%	23%	48,148	85%		54%	56,878	47%	
	Post FDP	9,009	17%	9%	3536	7%	28%	41,590	77%		52%	54,135	43%	
	2	5,882	15%	8%	2,322	6%	23%	29,840	78%		49%	38,045	41%	
	4	7,379	11%	7%	3,010	4%	22%	59,360	85%	>70%	51%	69,749	45%	>30%
	6	6,568	9%	6%	1,917	3%	19%	63,034	88%		47%	71,520	43%	
	8	6,610	10%	5%	2,471	4%	20%	57,620	86%		42%	66,702	37%	
	10	7,563	11%	5%	2,756	4%	23%	55,503	84%		37%	65,822	33%	
Boreal Foothill/ Omineca	0	15,322	7%	5%	5,448	2%	20%	197,640	90%		60%	218,409	55%	
	Post FDP	22,140	10%	7%	9,096	4%	28%	194,861	86%		55%	226,097	50%	
	2	10,405	6%	16%	3,367	2%	32%	159,807	92%		61%	173,578	57%	
	4	11,821	5%	5%	3,246	1%	20%	237,124	94%	>80%	53%	252,191	50%	>35%
	6	12,573	5%	4%	3,459	1%	19%	235,149	94%		50%	251,181	47%	
	8	11,934	5%	4%	3,074	1%	17%	237,987	94%		48%	252,995	45%	
	10	14,249	6%	4%	4,118	2%	13%	228,785	93%		41%	247,152	38%	
Wet Mountain	0	2,449	3%	5%	216	0%	13%	68,969	96%		61%	71,633	59%	
	Post FDP	3,210	4%	6%	645	1%	23%	68,014	95%		52%	71,870	50%	
	2	1,499	2%	18%	397	1%	22%	58,757	97%		64%	60,653	62%	
	4	1,670	2%	7%	126	0%	19%	80,299	98%	>85%	68%	82,095	66%	>60%
	6	1,543	2%	5%	273	0%	27%	80,616	98%		67%	82,432	65%	
	8	1,599	2%	4%	221	0%	16%	77,947	98%		63%	79,767	62%	
	10	1,586	2%	3%	111	0%	12%	79,418	98%		61%	81,115	60%	

REVISIONS:

No revisions are suggested for this indicator or objective.

2.5 SNAGS/LIVE TREE RETENTION

Indicator Statement	Target Statement
Number of snags and/or live trees (>17.5cm dbh) per ha on prescribed areas	Retain annually an average of at least 2 snags and/or live trees (>17.5 cm dbh) per hectare on prescribed areas

SFM Objective:

We will sustain sufficient and appropriately distributed suitable habitat elements to maintain native species richness.

We will sustain a natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance and stress.

STATUS AND COMMENTS:

Only three blocks were developed in 2005 since this indicator was adopted (T50015, T5018 and T5019). All three have portions of the block with areas prescribed for snags/live tree retention. None of these blocks have had harvesting start in 2005. Status of retention will be reported in the next annual report.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.6 COARSE WOODY DEBRIS

Indicator Statement	Target Statement
Average Coarse Woody debris size and m^3/ha on blocks harvested on the TFL since Jan 1, 2004	Average retention level over the TFL since Jan 1, 2004 will be at least 92 m^3/ha of which a minimum of 46 m^3/ha will be greater than 17.5cm in diameter
SFM Objective: We will sustain sufficient and appropriately distributed suitable habitat elements to maintain native species richness. We will sustain a natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbance and stress.	

STATUS AND COMMENTS:

Currently there are 11 plots that are required to be established on TFL 48. It is planned to establish these during the 2006 field season. Next reporting on the status of this indicator will be in 2010.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.7 AVERAGE MINIMUM WIDTH OF RRZ AND RMZ

Indicator Statement	Target Statement
Average minimum width of retention by Riparian Reserve Zone or Riparian Management Zone by appropriate stream, lake or wetland classification within cutblocks	We will meet or exceed the regulatory retention widths by Riparian Reserve Zone by appropriate stream, lake or wetland classification within cutblocks
SFM Objective: To have representative areas of naturally occurring and important ecosystems, and rare physical environments protected at both the broad and site specific levels across or adjacent to the DFA We will maintain water quality and quantity.	

STATUS AND COMMENTS:

The following table (Table 7) shows the summary of riparian reserve and management zones from 2000 to 2005. The targets have been met in 2005 and all previous years. It should be noted that where the minimum riparian management area (RMA) is not met this is due to more area being contained within the reserve zone (RRZ).

Table 7: Summary of Riparian Reserve and Management Zones in 2000-2005

Year	Stream, Wetland or Lake Class	Total Stream Length (m)[b]	RRZ – Required Width (m)[c]	RRZ–Actual Width (m)[c]	RMZ Required Width (m)[c]	RMZ – Actual Width (m)[c]	RMA Required Required (m)	RMA - Actual Actual (m)
2000	S1[a] (n=0)	**0**	50	0	20	0	70	0
	S2 (n=2)	**2,200**	30	30	20	50	50	80
	S3 (n=1)	**350**	20	20	20	60	40	80
	S4 (n=1)	**1,700**	0	0	30	30	30	30
	S5 (n=0)	**0**	0	0	30	0	30	0
	S6 (n=19)	**13,750**	0	0	20	32	20	32
2001	S1[a] (n=1)	**800**	50	78.7	20	0	70	78.7
	S2 (n=0)	**0**	30	0	20	0	50	0
	S3 (n=0)	**0**	20	0	20	0	40	0
	S4 (n=0)	**0**	0	0	30	0	30	0
	S5 (n=7)	**6,680**	0	46.3	30	4.8	30	51.1
	S6 (n=83)	**36,985**	0	9.1	20	15.3	20	24.4
2002	S1[a] (n=0)	**0**	50	0	20	0	70	0
	S2 (n=0)	**0**	30	0	20	0	50	0
	S3 (n=4)	**5,100**	20	61.4	20	5	40	66.4
	S4 (n=3)	**2,400**	0	0	30	30	30	30
	S5 (n=9)	**6,050**	0	0	30	34.2	30	34.2
	S6 (n=42)	**40,590**	0	0	20	26.7	20	26.7
2003	S1[a] (n=7)	**3,000**	50	50	20	20	70	70
	S2 (n=6)	**2,150**	30	30	20	20	50	74.4
	S3 (n=10)	**4,830**	20	61.8	20	3.6	40	65.5
	S4 (n=10)	**4,185**	0	6.7	30	30	30	34.2
	S5 (n=5)	**615**	0	0	30	30	30	30
	S6 (n=73)	**33,070**	0	1.6	20	18.7	20	20.3
2004	S1[a] (n=5)	**966**	50	61.4	20	10.4	70	71.8
	S2 (n=4)	**1,084**	30	102.9	20	9.1	50	112
	S3 (n=7)	**962**	20	33	20	6.7	40	39.7
	S4 (n=1)	**228**	0	21.1	30	9.9	30	31
	S5 (n=0)	**0**	0	0	30	0	30	0
	S6 (n=24)	**22,344**	0	17	20	6.2	20	23.2
2005	S1 (n=5)	15,048	50	67.2	20	2.8	70	70.0
	S2 (n=4)	2,984	30	125.6	20	2.1	50	127.7
	S3 (n=13)	6,482	20	79.2	20	3.7	40	82.9
	S4 (n=4)	1,475	0	20.0	30	10.4	30	30.4
	S5 (n=10)	5,844	0	27.8	30	6.2	30	34.0
	S6 (n=77)	34,130	0	15.9	20	12.4	20	28.4
	W3 (n=2)	382	0	29.6	30	0.4	30	30.0
Average	S1	**19,814**	50	64.8	20	5.6	70	70.4
	S2	**8,418**	30	73.3	20	20.1	50	93.4
	S3	**17,724**	20	65.7	20	5.3	40	71.0
	S4	**9,988**	0	6.2	30	26.7	30	32.9
	S5	**19,189**	0	24.6	30	15.3	30	39.9
	S6	**180,869**	0	7.3	20	18.1	20	25.3
	W3	**382**	0	29.6	30	0.4	30	30.0

a Channel widths for S1 streams are >20m, <100m.

b Streams that flow through, rather than adjacent to a block have had their lengths doubled to account for the application of RMA's to both sides. Therefore true stream length is less than reported in this table.

c RRZ and RMZ widths are applied to a single side of a stream. If stream flows through the block the length has been doubled (see footnote b) but the widths are not doubled.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.8 SHRUBS/EARLY FOREST

Indicator Statement	Target Statement
The proportion of shrub habitat (%) by Landscape Unit	Each landscape unit will meet or exceed the baseline target (%) proportion of shrub habitat
SFM Objective: We will sustain sufficient and appropriately distributed habitat elements to maintain native species richness.	

STATUS AND COMMENTS:

The following table (Table 8) indicates the current and post FDP condition of shrub habitat within the DFA as reported in the 2005 SFMP. There has been no change to the status of this indicator.

Table 8: Shrub Habitat – Current (2005), FDP Condition and Targets

Landscape Unit	Landscape Unit Total Area	Total Shrub Habitat				Baseline Target (%)
		Current Condition (2005)		FDP Condition (2010)		
		Ha	% Shrub of LU	Ha	% Shrub of LU	
BOUCHER	38,833	4,153	11%	6,569	17%	11%
BURNT-LEMORAY	129,490	14,502	11%	16,565	13%	10%
CARBON	93,029	10,451	11%	12,056	13%	10%
DUNLEVY	49,738	5,507	11%	5,972	12%	10%
EAST PINE	22,057	5,343	24%	6,963	32%	13%
GETHING	61,771	14,766	24%	15,482	25%	20%
HIGHHAT	92,608	7,604	8%	11,207	12%	10%
MARTIN CREEK	62,157	6,626	11%	8,318	13%	13%
WOLVERINE	93,994	7,629	8%	10,913	12%	10%
Grand Total	643,676	76,581	12%	94,045	15%	

REVISIONS:

During the 2005 external audit it was suggested that this indicator could be tied to geographic units that are more representative of natural conditions, such as Natural Disturbance Units. In response to this suggestion a change is proposed in how this indicator is reported.

Recommended Indicator:

The minimum proportion of shrub habitat (%) by Natural Disturbance Unit

Recommended Target:

Each Natural Disturbance Unit will meet or exceed the baseline target (%) proportion of shrub habitat as indicated in Table 9.

Table 9: Proposed Shrub Habitat Targets, Current and FDP Condition

NDU	NDU Subunit	Total NDU Area	2005 Shrub		2010 Shrub		Baseline Target %
			Ha	%	Ha	%	
Boreal Plains		120,891	15,762	13%	21,507	18%	14%
Boreal Foothills	Valley	178,225	25,245	14%	30,653	17%	12%
	Mountain	205,406	20,936	10%	24,540	12%	11%
Omineca	Valley	6,504	727	11%	722	11%	7%
	Mountain	15,031	1,277	8%	1,705	11%	10%
Wet Mountain		117,618	12,634	11%	14,919	13%	7%
Grand Total		643,676	76,581	12%	94,045	15%	

2.9 WILDLIFE TREE PATCHES

Indicator Statement	Target Statement
Cumulative wildlife tree patch percentage in blocks harvested since 1995 by landscape unit by BEC sub zone	Cumulative wildlife tree patch % will be at least 8% by BEC sub zone

SFM Objective:

We will sustain sufficient and appropriately distributed suitable habitat elements to maintain native species richness.

We will sustain a natural range of variability in ecosystem function, composition and structure, which allows ecosystems to recover from disturbance and stress.

STATUS AND COMMENTS:

The table below summarizes the current status for WTP retention levels for blocks on which harvesting began since 1995 and to the end of 2005. The WTP retention levels exceed the target in all subzones except the ESSFwc3, however 82% or 487 ha of the 592 ha under prescription have been harvested with an irregular shelterwood retention system. Typically 55% of the area is retained between the trails so 55% of the 487 ha is 268 ha plus the 25 ha of WTP prescribed is a total of 293 ha of retention or 49% of the total area under prescription.

Table 10: Summary of WTP's in Areas Harvested Since 1995

BEC Sub Zone	Total Area Under Prescription	WTP Area	WTP %
BWBSmw	3,243	465	14%
BWBSwk	1,248	168	13%
ESSFmv	5,064	556	11%
ESSFwc	592	25	4%
ESSFwk	3,657	322	9%
SBS wk	6,840	1,092	16%
Grand Total	**20,644**	**2,626**	**13%**

REVISIONS:

No revisions are suggested for this indicator or objective.

2.10 HABITAT SUPPLY FOR SPECIES OF PUBLIC CONCERN

Indicator Statement	Target Statement
Habitat supply for species of public interest (grizzly bear, wolverine, marten, fisher, elk, moose, caribou)	When habitat supply decreases by 20% of the baseline (year 2005) for species of public interest over time stand level management strategies will be developed within one year
SFM Objective: We will sustain sufficient and appropriately distributed suitable habitat elements to maintain native species richness.	

STATUS AND COMMENTS:

This indicator was first reported on in 2005 in the Draft SFMP. There have been no changes to this indicator since then. When the final analysis is completed in support of the timber supply analysis this indicator will be reassessed. It is expected that this will be done in 2006.

Moose was modeled for the summer feeding period. TFL 48 represents excellent moose habitat with over 475,000 ha classified in very high, high and moderate categories of habitat supply. Elk habitat was modeled as summer feeding habitat. TFL 48 represents excellent elk habitat with over 313,000 ha classified in very high, high and moderate categories of habitat supply.

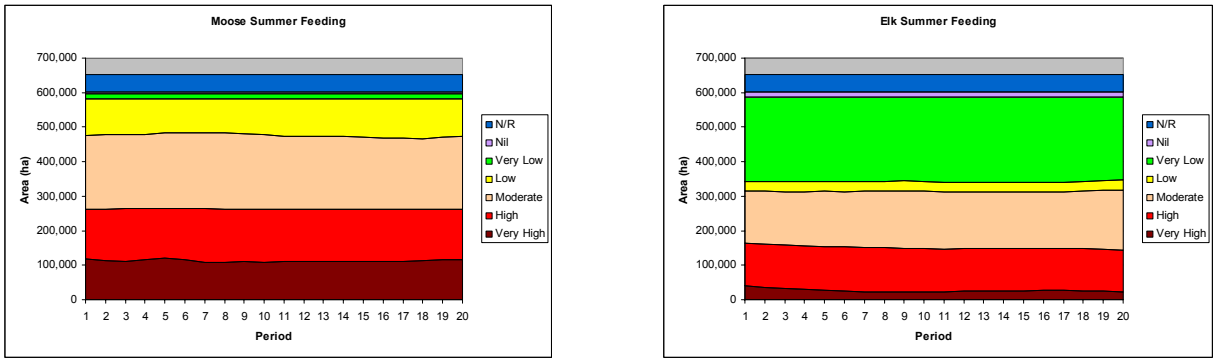

Figure 2: Moose and Elk Habitat Supply

Caribou was modeled for both late and early winter habitat types. In contrast to moose and elk there is comparatively little very high, high and moderate habitat for caribou, approximately 14,000 ha. (This is likely underrepresented with the current model.)

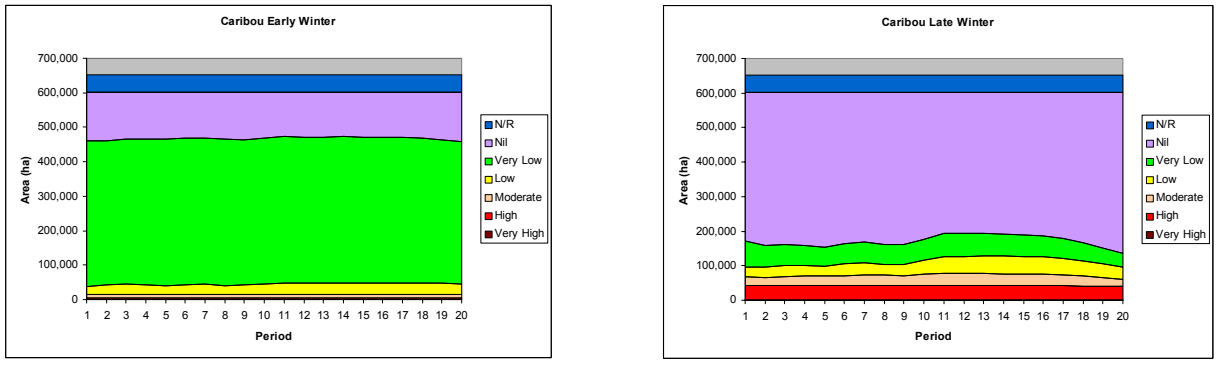

Figure 3: Caribou Habitat Supply

Marten habitat was modeled as general winter habitat. TFL 48 has a large amount of habitat (over 387,000 ha) modeled as very high, high and moderate. Fisher habitat was modeled as general winter habitat. TFL 48 represents a large area of very high, high and moderate habitat with over 283,000 ha classified in these categories.

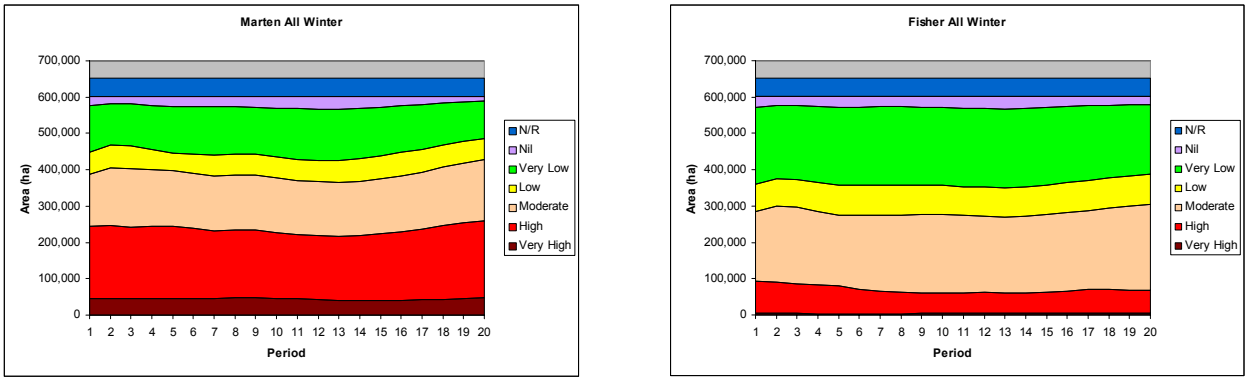

Figure 4: Marten and Fisher Habitat Supply

Grizzly bear habitat was modeled as spring feeding habitat. TFL 48 has a moderate amount of very high, high and moderate grizzly bear habitat with over 193,000 ha classified in these categories. Wolverine habitat was modeled as winter feeding habitat. TFL 48 represents an excellent area for wolverine with over 578,000 ha modeled as high and moderate habitat quality.

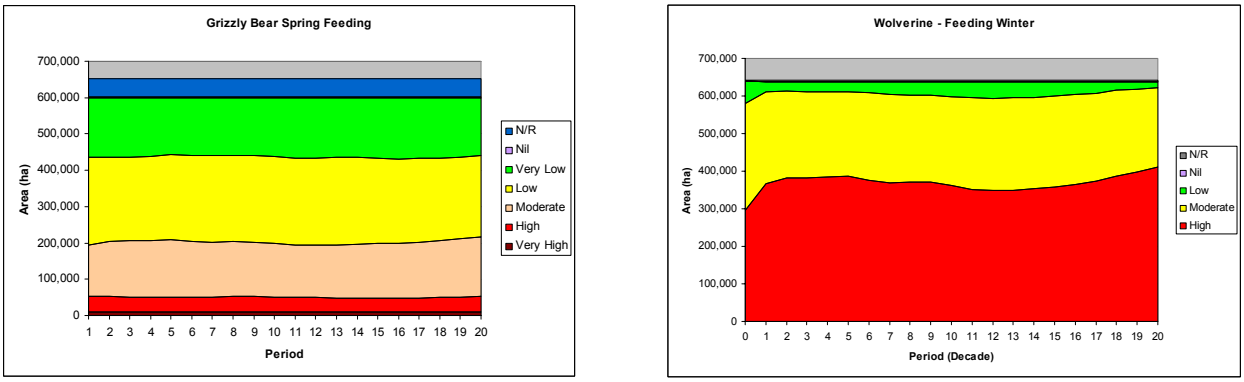

Figure 5: Grizzly Bear and Wolverine Habitat Supply

REVISIONS:

No revisions are suggested for this indicator or objective.

2.11 SPECIES OF MANAGEMENT CONCERN

Indicator Statement	Target Statement
Percent consistency with management strategies for species of management concern	On an annual basis, 100% of the management strategies for species of management concern are consistently being implemented as scheduled
SFM Objective: We will maintain sufficient habitats for species at risk.	

STATUS AND COMMENTS:

The implementation strategy for this indicator was to implement stand level management guidelines on all areas where layout was initiated after October 31, 2005. In 2005 there were no additional areas where layout was initiated past this date. The contract standards for all layout work have been updated to reflect the stand level management guidelines.

Canfor Chetwynd Division, in partnership with academia and the provincial government, is developing a new approach for identifying species of potential conservation concern based on stewardship responsibility, trend, threat and vulnerability (Fred Bunnell, pers comm June 23, 2006). The progress on the process to identify the species of conservation concern for TFL48 is as follows:

1. List all terrestrial vertebrates, vascular plants and freshwater fish in TFL 48 (complete);
2. Extract species of conservation concern based on stewardship responsibility, trend, threat and vulnerability (Squires 2005) (draft completed, not yet reviewed or finalized);
3. Determine which species are forest-dwelling based on previous list (draft completed, not yet reviewed or finalized);
4. Determine which species are sensitive to forest practices based on the previous list; and
5. Determine if the habitat needs of the species that are sensitive to forest practices are adequately addressed by coarse (i.e., ecosystem representation) and/or medium (i.e., retention of habitat elements) filters. If not, fine scale management strategies will be developed.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.12 CONIFEROUS SEEDS

Indicator Statement	Target Statement
The proportion of seeds for coniferous species collected and seedlings planted in accordance with the regulation	All coniferous seeds will be collected and seedlings will be planted in accordance with the regulations
SFM Objectives: Conserve genetic diversity of tree stock.	

STATUS AND COMMENTS:

All (100%) seedlots grown and planted within the DFA are registered in accordance with the Forest Planning and Practices Regulation and the Chief Forester's Seed Use Standards effective April 1, 2005.

All seeds have been registered with and tracked by Tree Improvement Branch of the Ministry of Forests and Range.

In 2005 there were a total of 2,856,504 trees planted on TFL 48 of which BCTS and Canfor planted 83,418 and 2,773,086 respectively. In 2005 all coniferous seeds were collected and seedlings were planted in accordance with the regulations (The Tree Cone, Seed and Vegetative Material Regulation (BC Reg 164/95)).

REVISIONS:

No revisions are suggested for this indicator or objective.

2.13 DECIDUOUS SEEDS AND VEGETATIVE MATERIAL

Indicator Statement	Target Statement
The proportion of seed or vegetative material for deciduous species collected and planted in accordance with the regulation	All deciduous species will be collected and planted in accordance with the regulations
SFM Objectives: We will conserve genetic diversity of tree stock.	

STATUS AND COMMENTS:

Canfor has not planted any deciduous seedlings or vegetative propagates on TFL 48. Any (100%) seedlots grown or planted within TFL 48 will be registered in accordance with the Forest Planning and Practices Regulation and the Chief Forester's Seed Use Standards effective April 1, 2005.

All seeds will be registered with and tracked by Tree Improvement Branch of the Ministry of Forests and Range.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.14 CLASS A PARKS, ECOLOGICAL RESERVES AND LRMP DESIGNATED PROTECTED AREAS

Indicator Statement	Target Statement
Hectares of forestry related harvesting or road construction within Class A parks, protected areas, ecological reserves and LRMP designated protected areas	Zero hectares of forestry related harvesting or road construction within Class A parks, protected areas, ecological reserves or LRMP designated protected areas
SFM Objective: We will implement management strategies appropriate to the long-term maintenance of protected areas and sites of special biological significance.	

STATUS AND COMMENTS:

In 2005 there was no harvesting or road construction within Class A parks, protected areas, ecological reserves or LRMP designated protected areas.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.15 WILDLIFE HABITAT AREAS, UNGULATE WINTER RANGES AND DUNLEVY CREEK MANAGEMENT PLAN

Indicator Statement	Target Statement
Proportion of activities consistent with objectives of Wildlife Habitat Areas (WHA), Ungulate Winter Ranges (UWR), and Dunlevy Creek Management Plan	All forest management activities will be consistent with objectives of Wildlife Habitat Areas (WHA), Ungulate Winter Ranges (UWR), and Dunlevy Creek Management Plan
SFM Objective: We will implement management strategies appropriate to the long-term maintenance of protected areas and sites of special biological significance.	

STATUS AND COMMENTS:

In 2005 there were no activities within UWR's, WHA's, or the Dunlevy Creek Management Plan area. This was consistent with the objectives.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.16 FOREST HEALTH

Indicator Statement	Target Statement
% of significant detected forest health damaging events which have treatment plans prepared	100% of significant detected forest health damaging events will have treatment plans prepared within 1 year of initial detection
SFM Objective: We will sustain a natural range of variability in ecosystem function, composition and structure, which allows ecosystems to recover from disturbances and stress.	

STATUS AND COMMENTS:

In 2005 there was one significant forest health damaging event occurring on TFL and that is the ongoing Mountain Pine Beetle (MPB) infestation.

Rates of over-wintering mortality ranged from lows of 37% in the South Hasler to 83% in the Carbon where 92% is needed to decrease populations.

R values, which are measures of brood success, ranged from a low of 0.38 in the Carbon to 2.93 in the Willow and 1.72 in Rocky Creek where numbers under 2 are low success and under 1 are unlikely to sustain themselves. Green to Red ratios ranged from 0.09 in the Upper Burnt to 5.49 in Sukunka Bluff with an average of 1.87 for the TFL and less than 1:1 needed for a declining population. 15% of the brood was in a two year cycle.

Beetle is having varied success and is valley dependent with some very successful populations in the Sukunka Valley, Murray River and Wolverine Valley.

Further beetle harvest is proposed in Canfor's second emergency FDP amendment to combat the most severe of the outbreaks and is expected to continue over the next several seasons.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.17 PROPORTION OF COMPLETED FOREST HEALTH ACTION PLANS

Indicator Statement	Target Statement
Proportion of required actions completed as per forest health treatment plans	100% of required actions will be completed as per forest health treatment plans
SFM Objective: We will sustain a natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbances and stress.	

STATUS AND COMMENTS:

There was one forest health treatment plan created in 2005 and it was completed as required.

MPB activities on the TFL in 2005/2006 consisted of an approximately 4.4 million-dollar program. Aerial overview flights were completed in September; ground probing was undertaken throughout the winter with 2,600 sites surveyed totaling 36,000 trees. Treatment was primarily single tree fall and burn with a total of 20,500 trees treated and an additional 10,000 treated through harvest. The level of treatment on the TFL was approximately 60% rather than the 80% objective due to funding pressures from the southern portion of the TSA, which drew monies out of the TFL because of the south to north strategy protecting the Alberta border.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.18 REGENERATION DECLARATION

Indicator Statement	Target Statement
Area weighted average time delay from harvesting starting and initial restocking of harvest area by DFA	Average delay will be no more than 2 years
SFM Objectives: We will sustain a natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbances and stress	

STATUS AND COMMENTS:

At the end of 2005 the average age of NSR on TFL 48 was 1.39 years for all areas where harvesting started prior to January 1, 2006.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.19 FREE GROWING STANDS

Indicator Statement	Target Statement
Proportion of area harvested that has free growing stands re-established	100% of the area harvested will meet the free growing requirements identified in the silviculture prescriptions/site plans
SFM Objectives: We will sustain a natural range of variability in ecosystem function, composition and structure which allows ecosystems to recover from disturbances and stress	

STATUS AND COMMENTS:

All areas harvested have met free growing requirements as identified in the silviculture prescriptions/site plans. No areas are past the free growing timelines. See Figure 6 for status of areas harvested on TFL where there is a free growing requirement.

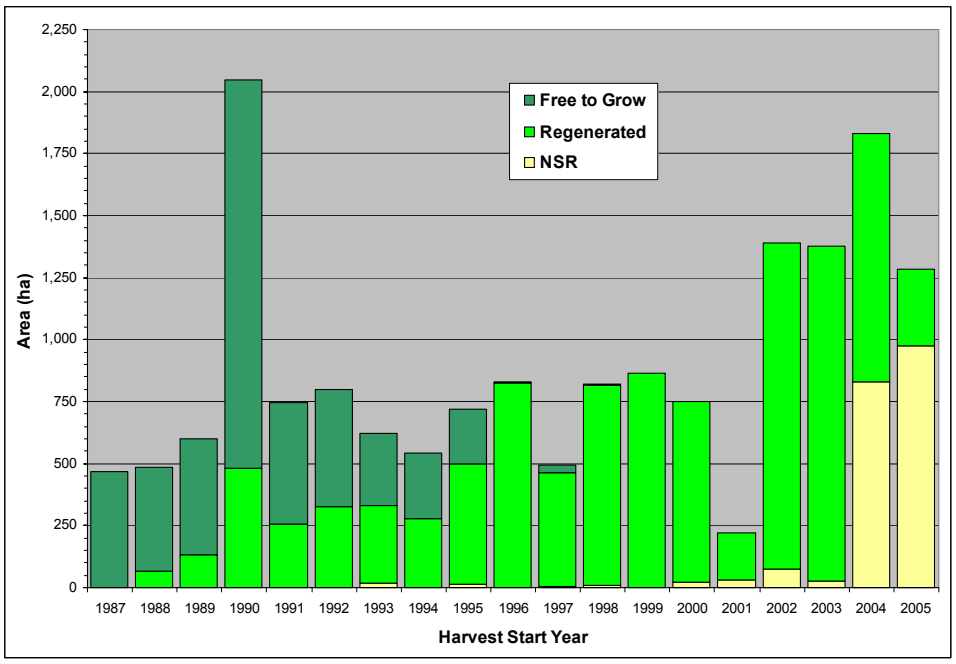

Figure 6: Regeneration/Free Growing Status by Year of Harvest Start

REVISIONS:

No revisions are suggested for this indicator or objective.

2.20 PERMANENT ACCESS CORRIDORS

Indicator Statement	Target Statement
Percent of area of the DFA occupied by permanent access corridors associated with forest management activities	We will limit impacts on the land base due to the presence of permanent access corridors to less than 2.4% of the gross land base of the DFA
SFM Objective: We will sustain the natural range of ecosystem productivity to support naturally occurring species. We will protect soil resources to sustain productive forests. We will sustain forests within the DFA.	

STATUS AND COMMENTS:

The following table reports the status as of SFMP 4. The next reporting of this indicator will be in 2010.

Table 11: Permanent Access Corridors in TFL 48 (Existing)

Road Type (RoW width in metres)	Total Area (ha)	% of Gross TFL Area (653,576 ha)
Undistinguished Road type but delineated in VRI	4,709	0.72%
1 - ML (25m)	96	0.01%
2 - ML Sec (20m)	329	0.05%
3 - Operational (15m)	760	0.12%
4 - Block Perm (8m)	1,676	0.26%
Gravel Sec (30m)	52	0.01%
Grand Total	7,623	1.17%

Source VRI 2004

REVISIONS:

No revisions are suggested for this indicator or objective.

2.21 SITE INDEX

Indicator Statement	Target Statement
Area weighted average Site Index by ecological site series by leading species	The area weighted average Site Index by leading species by site series at free growing will not be less than the SIBEC predicted site index
SFM Objective: We will sustain the natural range of ecosystem productivity to support naturally occurring species. We will protect soil resources to sustain productive forests.	

STATUS AND COMMENTS:

The following Table 12 shows the current status for stands declared free growing on TFL 48 and site productivity assessed using the growth intercept methodology. The area declared free growing is 3,853 ha that have had surveys completed which have collected growth intercept data during free growing surveys.

The ESSFmv2 04 Lodgepole Pine and the SBSwk2 06 White Spruce units are currently below the predicted site index. They both however are within the 10% allowable variance. There are currently 1.4 ha and 6.0 ha in each unit respectively.

Table 12: Site Index by Leading Species for Free Growing Stands

		Species								
		Alpine Fir			White Spruce			Lodgepole Pine - Interior		
BEC	Site Series	Ha	Actual SI	Predicted SI[2]	Ha	Actual SI	Predicted SI	Ha	Actual SI	Predicted SI
BWBSmw	01	37.0	21.7	N/A	173.4	21.4	17.8	90.3	24.6	18.0
	02	3.9	22.0	N/A	8.1	21.9	9.0	3.5	27.9	12.0
	03	1.6	22.1	N/A	17.8	22.3	17.0	0.3	24.9	18.0
	04	0.0	25.0	N/A	26.5	24.1	12.0	6.2	25.1	15.0
	05	0.3	22.2	N/A	16.2	23.3	18.0	19.2	26.1	18.0
	06			N/A	0.0	28.0	17.9			18.0
	07			N/A	0.1	22.0	18.0	0.0	20.0	18.0
BWBSmw1 Total		42.8	21.8	N/A	242.1	21.9	16.8	119.5	25.0	17.7
BWBSwk1	01			N/A	102.6	21.1	12.0	99.2	17.8	15.0
	02			N/A	15.3	20.0	9.0	10.3	16.3	12.0
	03			N/A	14.2	19.2	9.0	15.3	16.5	12.0
	04			N/A			12.0	0.5	16.0	15.0
	05			N/A	0.0	20.0	15.0	0.0	21.0	15.0
	06			N/A	0.0	21.0	15.0			15.0
BWBSwk1 Total				N/A	132.1	20.8	11.3	125.3	17.5	14.4
BWBSwk2	01	4.3	19.0	N/A	76.8	18.9	12.0			15.0
	02			N/A	1.9	18.0	9.0			12.0
	03			N/A	1.3	18.0	12.0			15.0
	04			N/A	2.5	18.0	9.0			12.0
	05			N/A	2.6	18.0	15.0			15.0
BWBSwk2 Total		4.3	19.0	N/A	85.1	18.8	11.9			0.0
ESSFmv2	01	258.3	19.8	12.0	437.5	18.1	15.0	156.1	20.2	15.0
	02	9.3	21.8	9.0	38.2	19.7	9.0	2.7	22.0	12.0
	03	6.5	21.8	6.0	19.3	17.4	6.0	22.6	22.0	9.0
	04	15.0	21.8	15.0	154.3	19.0	15.0	1.4	17.8	18.0
	05			15.0	0.1	20.0	15.0	0.4	22.0	15.0
	06			15.0	0.8	19.9	15.0	0.0	24.0	15.0
ESSFmv2 Total		289.0	20.0	11.9	650.2	18.4	14.4	183.2	20.4	14.2
ESSFmv4	01			12.0	45.8	18.0	15.0			15.0
	02			9.0	0.2	18.0	9.0			12.0
	03			6.0	0.0	18.0	6.0			9.0
	04			15.0	0.5	18.0	15.0			18.0
ESSFmv4 Total				0.0	46.5	18.0	15.0			0.0
ESSFwk2	01	19.2	15.1	15.0	89.4	17.8	15.0			N/A
	02	0.8	15.0	9.0	17.7	17.7	9.0			N/A
	03	20.6	19.2	12.0	20.7	20.8	12.0			15.0
	04	29.8	18.7	15.0	5.7	21.2	15.0			N/A
	05			15.0	1.2	21.2	15.0			N/A
ESSFwk2 Total		70.4	17.8	14.1	134.8	18.4	13.7			0.0
SBSwk2	01	254.5	22.4	15.0	627.7	20.8	18.0	62.9	21.3	21.0
	02	24.3	20.1	12.0	35.4	21.3	15.0	1.6	19.7	15.0
	03	45.2	21.0	12.0	228.3	21.4	18.0	39.7	19.1	18.0
	04	98.4	20.0	N/A	65.6	21.1	15.0	1.2	20.4	18.0
	05	74.8	23.5	18.0	115.6	21.3	21.0	17.4	22.5	21.0
	06	8.8	26.2	18.0	6.0	23.0	24.0	2.2	21.8	21.0
	07	9.1	22.4	N/A	6.3	19.5	N/A	2.2	15.0	N/A
SBSwk2 Total		515.1	21.9	12.0	1,085.0	21.0	18.0	127.3	20.6	19.6
Grand		921.6	21.0	11.5	2,375.8	20.1	16.0	555.3	20.8	16.2

REVISIONS:

No revisions are suggested for this indicator or objective.

[2] Based on SIBEC March 2005 Version

2.22 AAC

Indicator Statement	Target Statement
Allowable Annual Cut	We will ensure that the Allowable Annual Cut will not adversely impact Long Term Harvest Level
SFM Objective: We will sustain the natural range of ecosystem productivity to support naturally occurring species. We will balance annual growth rate and harvest rate.	

STATUS AND COMMENTS:

The latest TSR Analysis Report was completed and submitted in March 2001, and the AAC Rationale was effective September 20th, 2001. See Table 13 for a history of the AAC's for TFL 48 and a summary of the proposed AAC for SFMP 4. The next TSR Analysis is scheduled to be submitted to the Chief Forester and the determination to be completed prior to September 20th, 2006. At this time there is no change to the proposed AAC reported in the draft SFMP 4.

Table 13: Annual Allowable Cut and Long-Term Harvest Level

Partition	MP 1	MP 2	SFMP 3	SFMP 4	
	AAC	AAC	AAC	Proposed AAC Decade 1	Proposed AAC Decade 2+
Coniferous	410,000	460,000	525,000	729,000	558,000
Deciduous	0	54,000	55,000	85,000	85,000
Total	**410,000**	**514,000**	**580,000**	**814,001**	**643,000**

REVISIONS:

No revisions are suggested for this indicator or objective.

2.23 SOIL DEGRADATION

Indicator Statement	Target Statement
Soil degradation	We will not exceed site degradation guidelines as defined in site plans
SFM Objective: We will protect soil resources to sustain productive forests.	

STATUS AND COMMENTS:

All blocks with harvest completed in 2005 (n=55) have been within the site degradation guidelines defined in site plans.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.24 SOIL DISTURBANCE SURVEYS

Indicator Statement	Target Statement
Soil disturbance surveys	We will not exceed soil disturbance limits within cutblocks as defined in site plans
SFM Objective: We will protect soil resources to sustain productive forests.	

STATUS AND COMMENTS:

All blocks with harvest completed in 2005 (n=55) have been within the soil disturbance guidelines defined in site plans.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.25 USE OF ENVIRONMENTALLY FRIENDLY LUBRICANTS

Indicator Statement	Target Statement
Use of environmentally friendly lubricants	We will research and identify environmentally friendly lubricants bi-annually
SFM Objective: We will protect soil resources to sustain productive forests.	

STATUS AND COMMENTS:

Synthetic and vegetable-based hydraulic fluids are available, however they are currently regarded as inferior to hydrocarbon based fluids on the basis of cost and performance. Therefore no operational use of these lubricants has occurred.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.26 SPILLS ENTERING WATERBODIES

Indicator Statement	Target Statement
Number of reportable spills or misapplications entering water bodies	Zero reportable spills or misapplications entering water bodies
SFM Objective: Maintenance of water quality	

STATUS AND COMMENTS:

There were no spills or misapplications entering water bodies in 2005 or since monitoring of this indicator began in 2000.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.27 STREAM CROSSING QUALITY INDEX

Indicator Statement	Target Statement
Maximum Stream Crossing Quality Index (SCQI) by watershed	The maximum SCQI score is 0.40 by watershed
SFM Objective: We will maintain water quality and quantity.	

STATUS AND COMMENTS:

In the 2005 field season 99 crossings were surveyed in the Lower Burnt sub-basin, 77 additional crossings in the Lower Sukunka sub-basin, and 15 additional crossings in the Brazion sub-basin. The cumulative results to date are summarized by watershed in Table 14. All watersheds are below the maximum target level.

Table 14: SCQI and Water Quality Concerns for Three Sub-Basins within TFL 48 – Sampling Completed 2001 to 2005

Watershed Name	n	Erosion Indices			Water Quality Concern Ratings				
		Stream Crossing Density Index	Sum of Stream Crossing Quality Scores	Stream Crossing Quality Index	Stream Width Class[1]	None[2] % (#streams/ #streams sampled)	Low[3] % (#streams/ #streams sampled)	Medium[4] % (#streams/ #streams sampled)	High[5] % (#streams/ #streams sampled)
Gaylard	47	0.30	14.9	0.10	1	0.0	0.0	0.0	0.0
					2	33.3	66.7	0.0	0.0
					3	40.0	20.0	26.7	13.3
					4	46.7	13.3	26.7	13.3
					5	36.4	18.2	9.0	36.4
Lower Peace	61	0.44	18.7	0.14	1	0.0	0.0	0.0	0.0
					2	33.3	33.3	33.3	0.0
					3	12.5	75.0	12.5	0.0
					4	31.3	50.0	0.0	18.7
					5	23.5	41.2	11.8	23.5
Gething	70	0.38	28.3	0.15	1	60.0	40.0	0.0	0.0
					2	0.0	0.0	66.7	33.3
					3	36.4	27.2	36.4	0.0
					4	24.0	40.0	4.0	32.0
					5	19.2	23.1	19.2	38.5
Wolverine	51	0.28	16.2	0.09	1	0.0	0.0	0.0	0.0
					2	25.0	75.0	0.0	0.0
					3	60.0	0.0	0.0	40.0
					4	46.7	33.3	13.3	6.7
					5	18.5	44.5	33.3	3.7
Middle Wolverine	22	0.13	3.96	0.02	1	0.0	0.0	0.0	0.0
					2	66.7	0.0	0.0	33.3
					3	72.7	9.1	0.0	18.2
					4	50.0	50.0	0.0	0.0
					5	75.0	25.0	0.0	0.0
Hasler	119	0.63	71.23	0.37	1	0	0	0	0
					2	0	66.7	33.3	0
					3	5.9	17.7	29.4	47.1
					4	3.3	26.7	26.7	43.3
					5	0	29.7	35.1	35.1
Brazion	105	0.32	34.48	0.11	1	0	0	0	0
					2	20.0	40.0	0	40.0
					3	5.6	44.4	22.2	27.8
					4	27.2	47.3	16.4	9.1
					5	22.2	55.6	14.8	7.4

Watershed Name	n	Erosion Indices			Water Quality Concern Ratings				
		Stream Crossing Density Index	Sum of Stream Crossing Quality Scores	Stream Crossing Quality Index	Stream Width Class[1]	None[2] % (#streams/ #streams sampled)	Low[3] % (#streams/ #streams sampled)	Medium[4] % (#streams/ #streams sampled)	High[5] % (#streams/ #streams sampled)
Highhat	108	0.68	30.27	0.19	1	0	0	0	0
					2	0	0	100.0	0
					3	20.0	50.0	10.0	20.0
					4	21.3	42.6	23.0	13.1
					5	36.1	44.4	16.7	2.8
Lower Carbon	61	0.46	23.32	0.17	1	0	100.0	0	0
					2	100.0	0	0	0
					3	16.7	25.0	33.3	25.0
					4	13.8	44.8	37.9	3.5
					5	11.1	33.3	38.9	16.7
Seven Mile	28	0.36	15.1	0.19	1	0	0	0	0
					2	100.0	0	0	0
					3	0	100.0	0	0
					4	0	27.8	38.9	33.3
					5	0	80.0	20.0	0
Eleven Mile	37	0.17	5.31	0.02	1	0	0	0	0
					2	33.3	66.7	0	0
					3	42.9	57.1	0	0
					4	35.0	55.0	10.0	0
					5	14.3	57.1	28.6	0
East and West Carbon	39	N/A[6]	N/A[6]	N/A[6]	1	0	0	0	0
					2	0	0	0	0
					3	0	50.0	37.5	12.5
					4	0	32.0	48.0	20.0
					5	0	66.7	33.3	0
Lower Sukunka	191	0.36	70.63	0.13	1	0.0	0.0	0.0	0.0
					2	0.0	66.7	0.0	33.3
					3	10.0	30.0	15.0	45.0
					4	20.2	41.5	10.6	27.7
					5	28.8	37.0	23.3	10.9
Lower Pine	44	0.27	17.44	0.11	1	0.0	0.0	0.0	0.0
					2	0.0	0.0	0.0	0.0
					3	0.0	50.0	50.0	0.0
					4	16.7	46.7	13.3	23.4
					5	41.7	25.0	25.0	8.3
Lower Burnt sub-basin	99	0.16	57.52	0.09	1	100	0.0	0.0	0.0
					2	33.3	0.0	66.7	0.0
					3	9.1	45.5	18.2	27.3
					4	7.7	25.6	28.2	38.4
					5	4.4	26.7	26.7	42.2

1. 1 = greater than 20m, 2 = 5 to 20m, 3 = 1.5 to 5m, 4 = 0.5 to 1.5m, 5 = less than 0.5m
2. SCQI scores of 0.00
3. SCQI scores between 0.01 and 0.39
4. SCQI scores between 0.40 and 0.79
5. SCQI scores greater than 0.80
6. Erosion indices cannot be calculated because these areas are not true watersheds.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.28 ACTION PLANS FOR HIGH WATER QUALITY CONCERN RATING (WQCR)

Indicator Statement	Target Statement
Number of crossings with a High Water Quality Concern (WQCR) with actions plans prepared within one year of discovery	100% of High WQCR crossings will have action plans prepared within one year of discovery
SFM Objective: We will maintain water quality and quantity.	

STATUS AND COMMENTS:

For 2004 field surveys 100% of high WQCR crossings had action plans prepared within one year of discovery. Of the 40 high WQCR inspections, zero remain outstanding.

REVISIONS:

No revisions are suggested for this indicator or objective

2.29 PEAK FLOW INDEX

Indicator Statement	Target Statement
The percentage of watersheds within TFL 48 achieving baseline thresholds for Peak Flow Index	A minimum of 95% of the watersheds within TFL 48 will be below the baseline threshold
SFM Objective: We will maintain water quality and quantity.	

STATUS AND COMMENTS:

There has been no change to the projected status of this indicator since it was reported in SFMP 4. Currently 33 of 34 watersheds (97%) are meeting the PFI target. The Johnson watershed is currently not meeting the PFI target. This is due to the RAN fire (1985), which covered a large portion of the watershed. There is no new proposed harvesting within the Johnson watershed.

In the Medicine Woman Creek watershed there is an ECA area of 784 ha proposed which results in a post FDP PFI of 41.8 exceeding the max PFI of 35. No fieldwork has been completed in the Medicine Woman Creek watershed. The intent of harvest areas proposed within this watershed is a system of reserves, patches and retention. The original analysis completed for this assessment assumed that all areas would be harvested with no retention. When harvest areas are defined in the field the total harvest area will be reduced through the inclusion of reserves, patches or other retention to ensure compliance with the maximum peak flow index threshold.

Table 15: Peak Flow Index Current Status and Post FDP Status

TFL Block	Watershed	Watershed or Residual	H60 Elevation	Watershed Area	Disturbance Area (ha)	Current ECA (ha)	Current PFI (%)	Post FDP ECA (ha)	Post FDP PFI (%)	Max PFI
1	Adams Creek	W	1107	5,458	0	0	0	0	0	43
1	Aylard Creek	W	1036	5,456	25	37	0.7	37	0.7	37
1	Basin "862"	W	853	4,884	767	953	19.5	953	19.5	43
1	Beany Creek	W	958	3,899	54	55	1.4	858	22.0	37
1	Dunlevy Creek	W	1047	17,007	307	401	2.4	1,171	6.9	31
1	North Peace Residual	R	929	9,462	22	24	0.3	24	0.3	50
1	Ruddy Creek	W	922	6,445	81	84	1.3	422	6.6	31
2	Cameron Creek	W	783	3,613	0	0	0	0	0	50
2	Eleven Mile	W	1326	21,603	585	583	2.7	1,549	7.2	43
2	Gaylard	W	1029	15,638	2,408	2,850	18.2	3,947	25.2	31
2	Gething	W	996	18,505	2,514	2,658	14.4	3,548	19.2	31
2	Johnson	W	891	21,153	7,241	7,967	37.7	7,967	37.7	37
2	Lebleu Creek	W	874	1,999	0	0	0	40	2.0	50
2	Lower Carbon	W	1057	13,167	1,038	1,199	9.1	1,766	13.4	50
2	Lower Peace Reach	R	955	14,347	2,485	2,951	20.6	2,951	20.6	50
2	Medicine Woman Creek	W	975	1,876	0	0	0	784	41.8	35
2	Seven Mile	W	1257	7,878	254	288	3.7	690	8.8	43
2	Upper Carbon	W	1291	46,258	1,943	1,849	4.0	2,332	5.0	37
4	Brazion Creek	W	1220	32,375	8,067	4,034	12.5	5,014	15.5	37
4	Burnt Creek	W	1185	62,161	8,594	6,397	10.3	9,482	15.3	37
4	Gwillim	W	1066	4,488	173	147	3.3	557	12.4	43
4	Hasler Creek	W	1077	19,010	2,335	2,305	12.1	3,016	15.9	37
4	Highat Creek	W	1037	15,647	2,719	2,632	16.8	3,578	22.9	43
4	Lemoray Creek	W	1291	11,190	425	340	3.0	340	3.0	37
4	Lower Pine Residual	R	923	16,228	1,255	1,844	11.4	3,139	19.3	43
4	Lower Sukunka	W	904	54,089	4,436	4,771	8.8	6,050	11.2	43
4	Trapper Creek	W	1179	7,571	1	0	0.0	0	0	37
4	Upper Pine Residual	R	1082	40,084	1,967	2,235	5.6	4,456	11.1	37
4	Upper Sukunka	W	1075	23,444	2,149	2,201	9.4	3,442	14.7	43
5	Lower Murray	W	1066	17,398	104	112	0.7	1,562	9.0	37
5	Lower Wolverine	W	1161	23,241	1,826	2,157	9.3	2,157	9.3	37
5	Middle Wolverine	W	1205	17,585	5,017	3,372	19.2	3,372	19.2	43
5	Upper Murray	W	1294	17,858	1,310	1,343	7.5	3,582	20.1	37
5	Upper Wolverine	W	1378	18,032	2,444	1,525	8.5	1,841	10.2	37

REVISIONS:

No revisions are suggested for this indicator or objective.

2.30 WATERSHED REVIEWS

Indicator Statement	Target Statement
The percentage of watersheds reviews completed where the baseline threshold is exceeded	100% of watersheds that exceed the baseline threshold will have a watershed review completed when new harvesting is planned
SFM Objective: We will maintain water quality and quantity.	

STATUS AND COMMENTS:

Currently there are no watershed reviews required.

There are 2 watersheds where the PFI is currently exceeded or proposed to be exceeded, the Johnson and Medicine Woman Creek watersheds (see Table 15). No new harvesting is proposed in the Johnson watershed so a review is not required. If new harvesting is proposed then a watershed review will be conducted to ensure that there are no detrimental effects created through the additional harvesting.

In the Medicine Woman Creek watershed there is an ECA area of 784 ha proposed which results in a post FDP PFI of 41.8 exceeding the max PFI of 35. No fieldwork has been completed in the Medicine Woman Creek watershed. The intent of harvest areas proposed within this watershed is a system of reserves, patches and retention. The original analysis completed for this assessment assumed that all areas would be harvested with no retention. When harvest areas are defined in the field the total harvest area will be reduced through the use of reserves, patches or other retention to ensure compliance with the maximum peak flow index threshold. Should the PFI still be exceeded then a detailed review will be conducted prior to harvest commencement consistent with this indicator.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.31 CARBON SEQUESTRATION

Indicator Statement	Target Statement
DFA Average Carbon (C) sequestration rate (Mg C/year)	Maintain DFA average carbon sequestration rates that are no more than 15% less than those achieved using the minimum natural range of variation
SFM Objective: We will maintain the processes for carbon uptake and storage within the natural range of variation.	

STATUS AND COMMENTS:

There has been no change in the status of this indicator since reported in SFMP 4. The next reporting of this indicator will be in 2010 or in conjunction with a change in the proposed harvest levels.

Following are two graphs, which provides an example of the average C sequestration rate for both an individual stand (Forecast AU 3 – Natural and Forecast AU 34 – Managed) and shows the average C sequestration rate over the whole DFA over time.

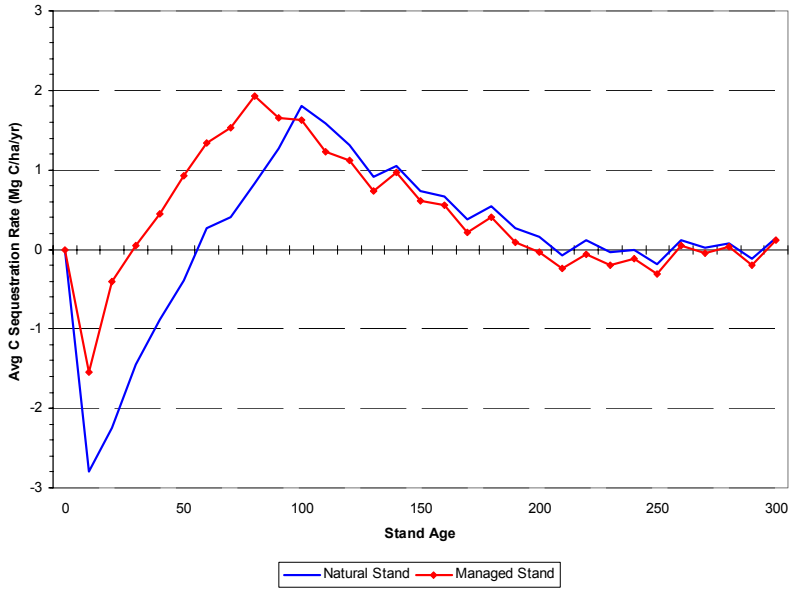

Figure 7: An Example of Average C Sequestration Rates for a Natural Spruce Leading BWBS Mesic Site Stand (Forecast AU 5) and an Associated Managed Stand (Forecast AU m^3)

At the stand level there is a greater release of C to the atmosphere following the decomposition of the larger pool of dead organic matter (snags and CWD) in the natural stand which results in a lower sequestration rate during the first several decades of stand development (Figure 7). In the example provided, the average sequestration rate takes longer to return to positive values in the natural stand versus the managed stand. This is partly related to the fact that the harvested wood removed from the site during harvesting does not contribute to ecosystem C release to the atmosphere. Rather, it is assumed to be stored in wood products.

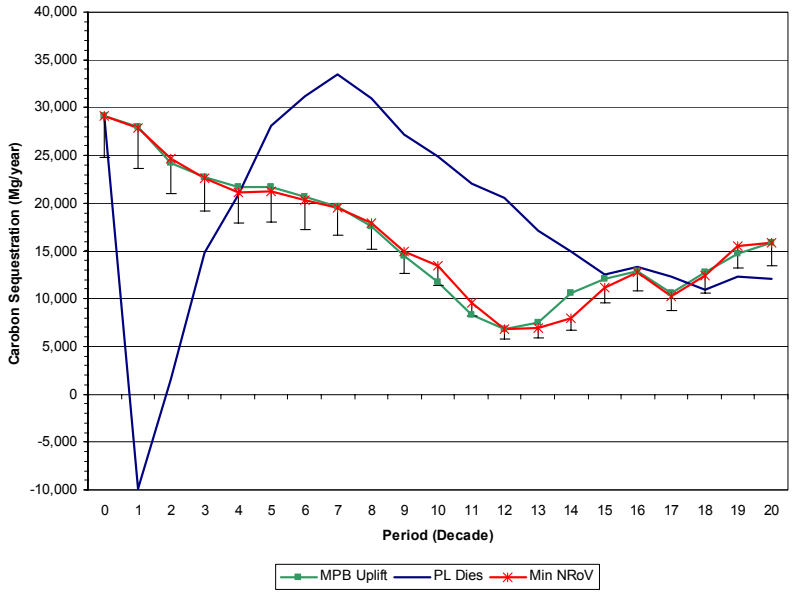

Figure 8: Carbon Sequestration (Mg C/year) within TFL 48 Over Time

At the DFA level the average sequestration rate declines from the present level of about 29,000 Mg C/yr over the next 120 years and stabilizes between 10,000 and 15,000 Mg C/yr in the long term. The decline from the current situation is due to the large amount of area (approximately 62%) that is between 40 and 140 years old and only 29% greater than 140 years old versus in 100 years the projection is that there will be only 31% of the land base between 40 and 140 years old and 58% greater than 140 years old. Over time the age class distribution is more evenly distributed with more area in younger stands and older stands with lower sequestration rates therefore the DFA level sequestration rate declines. For comparison purposes an estimate of the rate of C sequestration is provided for both the proposed AAC the sequestration rates using the minimum natural range of variation and the scenario where all pine is assumed to be killed in a mountain pine beetle outbreak.

There is no significant difference between the proposed harvest level and the minimum natural range of variation except for periods 10 and 11 in the simulation. After this point in time the sequestration rate is above or equivalent for the proposed harvest level.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.32 ECOSYSTEM CARBON STORAGE (MG) IN THE DFA

Indicator Statement	Target Statement
Ecosystem Carbon (C) Storage (Mg) in the DFA	Minimum of 95% of minimum natural range of variation disturbance levels of Ecosystem Carbon Storage
SFM Objective: We will maintain the processes for carbon uptake and storage within the natural range of variation.	

STATUS AND COMMENTS:

There has been no change in the status of this indicator since reported in SFMP 4. The next reporting of this indicator will be in 2010 or in conjunction with a change in the proposed harvest levels.

There is an estimated 122 million Mg of C currently stored in the TFL 48 ecosystem declining in the long term to approximately 76 million Mg of C (Figure 10). Both the C storage levels based on the proposed AAC and the minimum and maximum range of variation decline over the next 180 years and then stabilize for the remainder of the simulation. There is no significant difference between the different alternate strategies and the proposed strategy in ecosystem carbon storage over time.

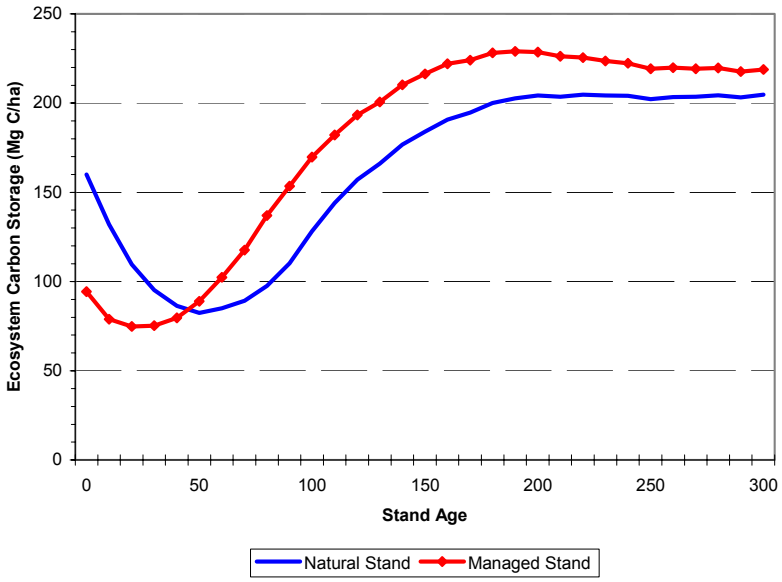

Figure 9: An Example of C Storage for a Natural Spruce Leading BWBS Mesic Site Stand (Forecast AU 5) and an Associated Managed Stand (Forecast AU m^3)

For comparison a stand level graph (Figure 9) is provided which demonstrates a natural stand and its associated managed stand C storage levels over time. Note that while the natural stand started with more C remaining on the site after the disturbance the managed stand catches up in about 40 years.

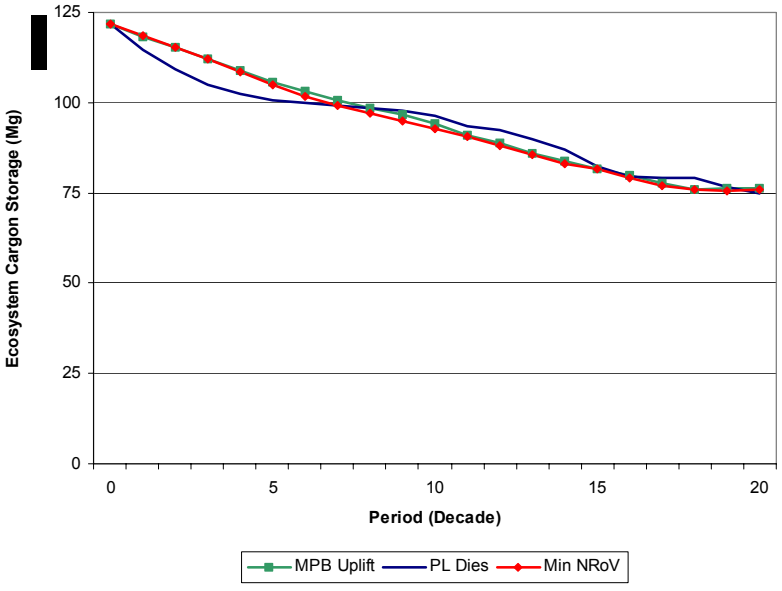

Figure 10: Total Ecosystem Carbon (Mg) Storage in the DFA Over Time

REVISIONS:

No revisions are suggested for this indicator or objective.

2.33 AREA OF FORESTED LAND

Indicator Statement	Target Statement
Area of forested land lost due to non-forest industry	We will track and monitor losses to other non-forest industry uses and incorporate these losses into AAC calculation every 5 years
SFM Objective: We will sustain forests within the DFA.	

STATUS AND COMMENTS:

There has been no change in the status of this indicator since reported in SFMP 4. The next reporting of this indicator will be in 2010 or in conjunction with a change in the proposed harvest levels.

During the term of MP 3 Canfor developed a spatial tracking system to identify what and where non-forest related activities were occurring within TFL 48. All activities proposed within TFL 48 are referred to Canfor and comments are provided which stress the objective of minimizing permanent removal of area from the forested land base. The following table (Table 16) shows reductions to the land base due to other uses.

Table 16: Reductions to Land Base Due to Other Uses (Excluding Roads[3])

Feature	Total Area (ha)
Well sites[4]	258
Mines [5][6]	1,723
Pipelines	388
Cutlines	1,793
Trails	485
Transmission Lines	201
Grand Total	4,848

REVISIONS:

No revisions are suggested for this indicator or objective.

[3] Roads are captured in Indicator 2.20 Permanent Access Corridors and are not easily separated as to which are used only by other industries or which are used only by the forest industry.

[4] Includes camps, decking areas, borrow pits and sumps

[5] Includes mines where clearing had started prior to December 2004 (Quintette, Pine Valley Coal and Dillon Mine). Other proposed mines are included as a sensitivity analysis.

[6] Includes roads within mine-cleared areas.

2.34 RANGE OPPORTUNITIES

Indicator Statement	Target Statement
Annual minimum number of Animal Unit Months opportunity	We will maintain an annual minimum of 1000 Animal Unit Months (excludes brush control by sheep grazing)
SFM Objective: Maintenance of water quality.	

STATUS AND COMMENTS:

The following table indicates the amount of grazing AUM's provided on TFL 48 in 2005. Spatial data was obtained from the Land and Resource Data Warehouse and AUM's were obtained from the MoFR Peace Forest District staff.

Table 17: AUM's on TFL48 in 2005

Range Tenure Type	Range Tenure	Total AUM's	% TFL	TFL AUM's
Grazing Licenses	RAN071469	268	79.0%	212
	RAN071476	263	11.3%	30
	RAN071818	174	100.0%	174
	RAN072880	40	99.6%	40
	RAN073020	800	58.7%	469
	RAN073021	437	58.6%	256
	RAN073342	525	58.7%	308
	RAN073876	1,080	35.1%	379
	RAN074239	50	100.0%	50
	RAN074307	400	40.3%	161
Grazing Permits	RAN071327	47	57.3%	27
Grand Total				2,106

REVISIONS:

No revisions are suggested for this indicator or objective.

2.35 MAINTENANCE OF VISUAL LANDSCAPE INVENTORY

Indicator Statement	Target Statement
Maintenance of Visual Landscape Inventory	We will maintain and update an approved visual landscape inventory
SFM Objective: We will provide opportunities for a feasible mix of timber, recreational activities, visual quality, and non-timber commercial activities.	

STATUS AND COMMENTS:

Canfor completed an update to the VLI in 1999, and provided recommended Visual Quality Objectives in March 2002. In 2005 the Ministry of Forests and Range subsequently reviewed all VLI's completed in the previous Dawson Creek Forest District and consolidated all information including Canfor's 1999 inventory, into one seamless VLI. During this process it was discovered that there were some errors in Canfor's previous VLI in that it did not contain some known scenic areas. The consolidated VLI polygons were classified into two separate classes, those with existing visual quality objectives (EVQO) and those new polygons (added in the Canfor 1999 VLI) with recommended visual quality classes (RVQC). The EVQO polygons including those previously missing from Canfor's data have been used in the base case timber supply analysis being completed in support of the SFMP 4. The RVQC polygons will be added to the EVQO areas and the impacts modeled in a sensitivity analysis. Pending the sensitivity analysis the MoFR will make a decision on establishing these as VQO's through a Government Actions Regulation Order. The analysis is expected to be completed and submitted to the MoFR in the summer of 2006.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.36 PROPORTION OF HARVESTING CONSISTENT WITH VISUAL SENSITIVITY CLASS

Indicator Statement	Target Statement
Proportion of harvesting within known visual areas that are consistent with the Visual Sensitivity Class (VSC)	100% of harvesting within visual areas will be consistent with the Visual Sensitivity Class
SFM Objective: We will provide opportunities for a feasible mix of timber, recreational activities, visual quality, and non-timber commercial activities.	

STATUS AND COMMENTS:

The blocks listed in Table 18 had harvesting completed in 2005 and were within areas with visual quality objectives. 100% of these blocks were consistent with the visual quality objective.

Table 18: Blocks Harvested in 2005 in Visual Zones

Cut Block ID	Consistent with VQO
B0025	Yes
B0029	Yes
T4062	Yes
T4081	Yes
T5004	Yes

REVISIONS:

This indicator contains an error in terminology and should refer to Visual Quality Objective rather than the Visual Sensitivity Class. Recommend that the reference to Visual Sensitivity Class (VSC) be changed to Visual Quality Objective (VQO) in both indicator and target statements.

2.37 BACK COUNTRY CONDITION

Indicator Statement	Target Statement
Proportion (%)of back country areas (ha) that are in a semi-primitive recreation opportunity spectrum (ROS) class	We will maintain or increase semi-primitive ROS in Klin se za, Bocock, Butler Ridge, Pine/Lemoray, Peace River/Boudreau and Elephant Ridge/Gwillim Protected Areas and manage Special Management Zones (Klin se za, North Burnt, Dunlevy) as per LRMP (See Table 19 for baseline)
SFM Objective: We will provide opportunities for a feasible mix of timber, recreational activities, visual quality, and non-timber commercial activities.	

STATUS AND COMMENTS:

There has been no change to the status of this indicator since reported in the SFMP 4 in 2005.

The baseline (2001) and current (2005) recreational opportunity spectrum for the stated Backcountry areas are shown on the following tables (Table 19 and Table 20). Over the term of MP 3 there has been harvesting and road building activity in both the Dunlevy and North Burnt back country areas. Primary road construction, harvesting, silviculture activities and deactivation have been completed. The change in condition has moved approximately 945 ha in the Dunlevy and 1,798 ha in the North Burnt areas from semi-primitive non-motorized to the semi primitive motorized classification. This change is acceptable within this indicator as the deactivation and removal of bridges in the Dunlevy and North Burnt, and de-construction of the road access to CP 722 in the northern portion of the North Burnt area have maintained motorized access barriers.

Table 19: Baseline Condition – ROS Inventory

Back Country Area	ROS Class Baseline Condition – (2001)							
	Roaded			Roaded Total	Semi Primitive		Semi Primitive Total	Grand Total
	Rural	Modified	Natural		Motorized	Non Motorized		
BOCOCK PEAK						1,126	1,126	1,126
BUTLER RIDGE			1,133	1,133	1,309	4,151	5,460	6,593
DUNLEVY CREEK			5,283	5,283	5,001	21,564	26,565	31,848
ELEPHANT RIDGE / GWILLIM		12		12		2,801	2,801	2,813
NORTH BURNT		53		53	6,076	10,683	16,759	16,813
PEACE RIVER / BOUDREAU	990			990		1,219	1,219	2,209
PINE - LEMORAY					882	2,260	3,142	3,142
KLIN SE ZA			0	0		2,668	2,668	2,669
KLIN SE ZA HEADWATERS			7,140	7,140	137	10,581	10,718	17,857
KLIN SE ZA MOUNTAIN			1,711	1,711		4,639	4,639	6,350
Grand Total	990	65	15,266	16,321	13,404	61,694	75,098	91,419

Table 20: Current Condition – ROS Inventory Updated to June 2005

Back Country Area	ROS Class (2005))							
	Roaded			Roaded Total	Semi Primitive		Semi Primitive Total	Grand Total
	Rural	Modified	Natural		Motorized	Non Motorized		
BOCOCK PEAK						1,126	1,126	1,126
BUTLER RIDGE			1,133	1,133	1,309	4,151	5,460	6,593
DUNLEVY CREEK			5,283	5,283	5,946	20,619	26,565	31,848
ELEPHANT RIDGE / GWILLIM		12		12		2,801	2,801	2,813
NORTH BURNT		53		53	7,874	8,886	16,759	16,813
PEACE RIVER / BOUDREAU	990			990		1,219	1,219	2,209
PINE - LEMORAY					882	2,260	3,142	3,142
KLIN SE ZA			0	0		2,668	2,668	2,669
KLIN SE ZA HEADWATERS			7,140	7,140	137	10,581	10,718	17,857
KLIN SE ZA MOUNTAIN			1,711	1,711		4,639	4,639	6,350
Grand Total	990	65	15,266	16,321	16,147	58,951	75,098	91,419

REVISIONS:

No revisions are suggested for this indicator or objective.

2.38 RECREATIONAL SITES

Indicator Statement	Target Statement
Number of recreational trails and campsites maintained by Canfor	Canfor will provide and/or maintain 1 backcountry trail and 3 campsites on TFL 48
SFM Objective: We will provide opportunities for a feasible mix of timber, recreational activities, visual quality and non-timber commercial values.	

STATUS AND COMMENTS:

Canfor currently maintains the Gething Creek, Carbon Lake and Wright Lake campsites and the 11 Mile Lake Trail. The Gething and Carbon are road access sites. Wright Lake campsite is a remote wilderness site with off highway vehicle or hiking access. The 11 Mile Lake trailhead is road accessible and with a gentle hike you can be in the alpine in just a few hours. All of these recreational values provide a number of outdoor activities (hunting, fishing, hiking and canoeing). All of the above recreational sites can be accessed from the Johnson Creek FSR.

In 2005 Canfor conducted maintenance at all of these locations, including:

- Snag falling,
- Fire ring replacement at Carbon and Gething sites,
- General clean up and refuse removal, all sites.
- Trail/brushing maintenance on the 11 Mile Lake trail.

REVISIONS:

No revisions are suggested for this indicator or objective

2.39 HARVEST LEVELS/VOLUMES

Indicator Statement	Target Statement
Harvest levels/volumes	Harvest volumes will not exceed 110% of the 5 year periodic cut control volume for the DFA
SFM Objective: We will ensure that harvest levels do not adversely impact the long term harvest level.	

STATUS AND COMMENTS:

Currently Canfor and BCTS have harvested 79.2% and 56.9% respectively of the total available harvest in the 2002 to 2006 cut control period. In 2006 Canfor has 497,267 m^3 of available harvest to achieve 100% or a maximum of 736,210 m^3 to not exceed 110% of the 5 year cut control.

Table 21: Actual Recorded and Allowable Annual Cut Summary

Year	Canfor Annual Cut Summary				BCTS Summary[2]			Deciduous Harvest Summary
	Allowable Annual Cut (m^3)	Adjustment (m^3)	Actual Recorded Cut (m^3)	Cut Control (%)	Allowable Annual Cut (m^3)	Actual Recorded Cut (m^3)	Cut Control (%)	
1987	348,500.0		319,871.0	91.8				
1988	348,500.0		277,930.0	79.8				
1989	348,500.0		183,330.0	52.6				
1990	348,500.0		456,600.0	131.0				
1991	348,500.0		555,001.0	159.3				
1987-1991 Total	**1,742,500.0**		**1,787,732.0**	**102.6**				
1992	348,500.0	-8,315.0	280,820.0	82.5				
1993	348,500.0	-8,315.0	389,447.9	114.5				
1994	348,500.0	-8,314.0	284,526.6	83.6				
1995	348,500.0	-8,314.0	313,409.0	92.1				
1996	348,500.0	-8,314.0	391,717.0	115.1				
1992-1996 Total	**1,742,500.0**	**-41,572.0**	**1,659,920.5**	**97.6**				
1997	401,370.0	16,516.0	343,587.6	82.2				
1998	401,370.0	16,516.0	435,088.2	104.1				
1999	401,370.0	16,516.0	532,574.3	127.4				
2000	401,370.0	16,516.0	302,668.0	72.4				
2001	419,713.0	16,516.0	339,306.1	77.8				
1997-2001 Total	**2,025,193.0**	**82,580.0**	**1,953,224.2**	**92.7**				
2002	466,370.0	0.00	499,000.0	107.0	55,350.0	57,400.7	103.7	0
2003	466,370.0	14,393.76	320,971.0[1]	66.8	55,350.0	93,978.1	169.8	0
2004	466,370.0	14,393.76	546,512.7	113.7	55,350.0	0.0	0.0	0
2005	466,370.0	14,393.76	525,673.5	109.3	55,350.0	6,104.3[3]	11.0	0
2006	466,370.0	14,393.76			55,350.0			
Running Total	**2,331,850.0**	**57,575.04**	**1,892,157.21**	**79.2**	**276,750.0**	**157,483.2**	**56.9**	**0**

Source: MoF Annual Cut Control Letters (1987-2004)

1 Note that this value represents the Ministries official billed volume. However based on Canfor's records the volume delivered to Canfor's scale was 431,324 m^3 or 89.7% of the AAC. The difference is due to some problems with the Ministry's billing of stumpage at the end of the cut control annual period. The MoF reported this volume in 2004.

2 BCTS volumes were reported using the MoFR Harvest Billing System reports.

3 This value represents the volume delivered from A77788 in 2005 as reported in the MoFR Harvest Billing System (HBS).

REVISIONS:

No revisions are suggested for this indicator or objective

2.40 WASTE

Indicator Statement	Target Statement
The percentage of blocks and roads assessed in which avoidable waste and residue levels are within the target range	Annually, 100% of cutblocks and roads will fall within the target avoidable waste and residue range
SFM Objective: We will ensure that harvest levels do not adversely impact the long term harvest level.	

STATUS AND COMMENTS:

All blocks were harvesting was completed in 2005 were within the target avoidable waste and residue range.

REVISIONS:

No revisions are suggested for this indicator or objective

2.41 SUMMER AND FALL DELIVERIES

Indicator Statement	Target Statement
Volume (m^3) of timber delivered annually to Canfor Chetwynd mill between May 1st and October 31st	Minimum of 150,000 m^3 coniferous delivered to Canfor Chetwynd mill
SFM Objective: We will maintain a local, up to date timber processing facility and infrastructure.	

STATUS AND COMMENTS:

In 2005 there were 232,246 m^3 of timber delivered from TFL 48 to the Canfor Chetwynd sawmill.

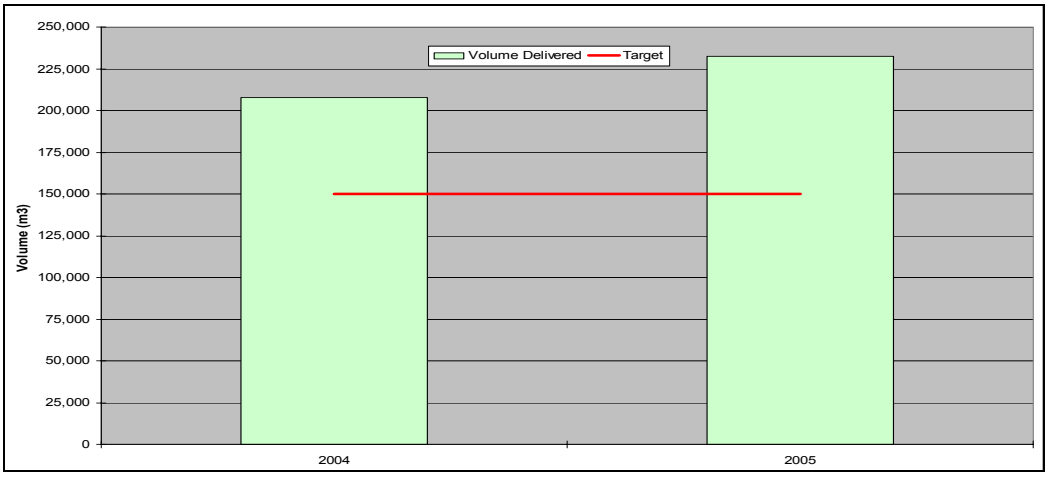

Figure 11: Summer and Fall Deliveries

REVISIONS:

No revisions are suggested for this indicator or objective.

2.42 LOCAL EMPLOYMENT

Indicator Statement	Target Statement
The proportion of dollars spent on local versus non-local contractors	A 5 year rolling average of 65% of local vs. non-local contractors and an annual minimum of 50% local versus non-local
SFM Objective: We will ensure local communities and contractors have the opportunity to share in benefits such as jobs, contracts and sales.	

STATUS AND COMMENTS:

See Figure 12 for current status of this indicator. In 2005, not including stumpage, Canfor paid $40,438,593 to all vendors. Local vendors or contractors were paid $32,885,235 or 81% of total expenditures. The five year rolling average from 2001 through 2005 saw 73% of expenditures made to local vendors or contractors.

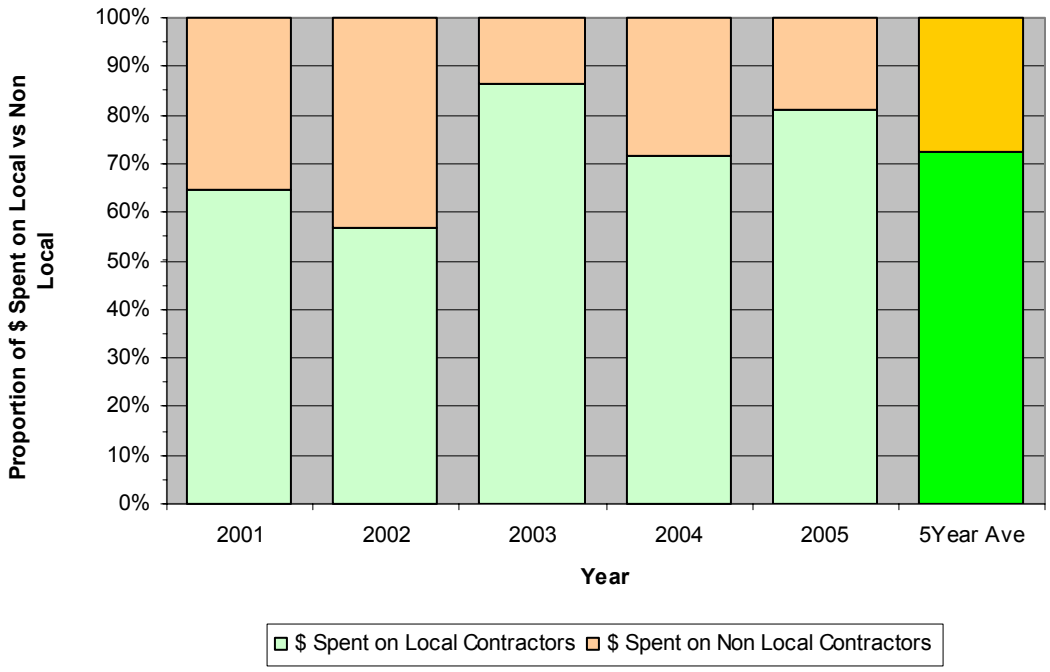

Figure 12: Proportion of Dollars Spent on Local vs Non-Local Contractors

REVISIONS:

No revisions are suggested for this indicator or objective

2.43 COMMUNITY DONATIONS

Indicator Statement	Target Statement
Canfor community donations per year	A minimum of $7,000/year will be made available for community donations
SFM Objective: We will ensure contributions and benefits to the community (ie. donations, training).	

STATUS AND COMMENTS:

In 2005 Canfor made available a minimum of $7,000 for community donations in fact $10,759.06 was distributed to 37 different organizations in Chetwynd, Tumbler Ridge, Hudson's Hope and Moberly Lake.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.44 CONSISTENCY WITH THIRD PARTY ACTION PLANS

Indicator Statement	Target Statement
Consistency with mutually agreed upon action plans for guides, trappers, range tenure holders, and other non-timber commercial interests	Operations 100% consistent with the resultant action plans
SFM Objective: To help ensure distribution of benefits, cooperative relationships, across local stakeholders and First Nations.	

STATUS AND COMMENTS:

In 2005 there were no specific third party action plans developed. It is anticipated that as time progresses and this becomes the standard way of addressing these concerns plans will be developed.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.45 KNOWN VALUES AND USES ADDRESSED IN OPERATIONAL PLANNING

Indicator Statement	Target Statement
Percentage of known traditional site-specific aboriginal values and uses identified during SFMP, FDP, FSP, or PMP referrals addressed in operational plans	100% of known traditional site-specific aboriginal values and uses identified during SFMP, FDP, FSP, or PMP referrals will be addressed in operational plans
SFM Objective: We will recognize and respect Treaty 8 rights.	

STATUS AND COMMENTS:

In 2005 there was one site-specific aboriginal value or use made known to Canfor within TFL 48. 100% of the site-specific values and uses identified in 2005 were addressed in operational plans as indicated below:

- Concerns were expressed about herbicide treatments within the West Moberly First Nation High Sustenance Use Area. Canfor committed to a perimeter buffer of 30 m on 237-002 due to the block being larger than 15 ha, over 200 m wide, the dominant vegetation was not grass, the application rate was greater than 4.5 L/ha and greater than 50% of the block was being treated. Adjacent to the 30 m perimeter buffer Canfor also completed a low drift application of 16 m. Without the low drift buffer the perimeter buffer would have been 50 m. The perimeter buffer was maintained along block edges w/ standing mature timber only (not the WTP).

REVISIONS:

No revisions are suggested for this indicator or objective.

2.46 CONFORMANCE TO ELEMENTS PERTINENT TO TREATY RIGHTS

Indicator Statement	Target Statement
% conformance to SFM elements pertinent to treaty rights (i.e., hunting, fishing and trapping) defined in Treaty 8	100% conformance to the SFM indicators and targets of the SFM Elements pertinent to sustaining hunting, fishing and trapping, as follows: • Element 1.1 Ecosystem Diversity (Indicators 3.1, 3.2, 3.3, and 3.4), and Element 1.2 Species Diversity (Habitat Elements) Indicators (3.5, 3.4, 3.6, 3.7, 3.8, 3.9 and 3.10), and • Element 3.2 Water Quality and Quantity Indicators (3.26, 3.27, 3.28, 3.29, and 3.30)
SFM Objective: We will recognize and respect Treaty 8 rights, and respect known traditional aboriginal forest values and uses.	

STATUS AND COMMENTS:

In 2005, 100% of the indicators listed in the target statement were achieved.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.47 LRMP IMPLEMENTATION MEETINGS ATTENDED BY CANFOR

Indicator Statement	Target Statement
Proportion of LRMP implementation or update meetings attended by Canfor	100% of meetings will be attended by Canfor and information provided as required
SFM Objective: We will support land use processes including the LRMP implementation.	

STATUS AND COMMENTS:

There was one LRMP meeting held on November 22, 2005. This meeting was primarily a reporting out on activities being worked on by government, such as agency restructuring, visual areas being made known under FRPA for the TSA, and work being conducted for the TSA on the Old Growth Order and adjustments to align with Natural Disturbance Units. There were no actions required from Canfor or BCTS as a result of the meeting.

Table 22: LRMP Meetings

Year	Number of LRMP Meetings	Number Attended by Canfor
1999	2	2
2000	4	4
2001	4	4
2002	1	1
2003	0	0
2004	1	1
2005	1	1

REVISIONS:

It is proposed to amend this indicator to include BCTS in the commitment to attend the LRMP meetings and provide input into the DFA.

2.48 PUBLIC ADVISORY COMMITTEE

Indicator Statement	Target Statement
Public Advisory Committee	We will establish and maintain Public Advisory Committee and hold at least two meetings annually
SFM Objective: We will have an effective and satisfactory process that enables public participation of stakeholders and First Nations.	

STATUS AND COMMENTS:

There were five meetings held with the Public Advisory Committee in 2005. These meetings were primarily held to gain input into the preparation of SFMP4.

Table 23: Public Advisory Committee Meetings

Year	Number of PAC Meetings
2000	8
2001	3
2002	3 (+1 field trip)
2003	1
2004	4
2005	5

REVISIONS:

No revisions are suggested for this indicator or objective.

2.49 PUBLIC ADVISORY COMMITTEE TERMS OF REFERENCE

Indicator Statement	Target Statement
Terms of reference (TOR) for the Chetwynd TFL 48 DFA public participation process	Obtain PAC acceptance of TOR for public participation process bi-annually (every 2 years)
SFM Objective: We will have an effective and satisfactory process that enables public participation of stakeholders and First Nations.	

STATUS AND COMMENTS:

The first Terms of Reference (TOR) was agreed to with the PAC on March 7, 2000. The last review was on July 7, 2004; minor changes have been made to the ToR between 2000 and 2004. The next scheduled review of the TOR is due in 2006.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.50 OPEN HOUSES

Indicator Statement	Target Statement
Number of open houses held to solicit broad public input	We will hold a minimum of one annual open house to review SFM plan performance.
SFM Objective: We will have an effective and satisfactory process that enables public participation of stakeholders and First Nations.	

STATUS AND COMMENTS:

One open house was held on July 7, 2005 in conjunction with our annual contactors meeting. No members of the public attended the session.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.51 RESPONSE TO PUBLIC INQUIRES

Indicator Statement	Target Statement
Percentage of timely responses to public inquires	We will respond to 100% of public inquiries concerning our forestry practices within one month of receipt and provide summary to PAC annually
SFM Objective: We will have an effective and satisfactory process that enables public participation of stakeholders and First Nations.	

STATUS AND COMMENTS:

In 2005 there were six public inquiries and 100% of these were responded to within one month of receipt. The summary of inquires and Canfor's responses are listed in Table 24.

Table 24: Summary of Public Inquiries and Response for 2005

Issue Identifier	Issue Description	Issue Date	Response	Response Date
ITS-CH2005-OP0001	Public request for information concerning news item heard on radio regarding new beetle rules to make harvesting beetle wood easier:	31-Jan-05	Responded with information (copy of news release) concerning MoFR news release regarding update to Emergency Bark Beetle Management Areas.	01-Feb-05
ITS-CH2005-OP0003	Request from Alberta Trappers Association for follow-up reports on Rice marten project.	01-Apr-05	Sent copy of Rice marten report to Alberta Trappers Association (email info@albertatrappers.com)	01-Apr-05
ITS-CH2005-OP0007	Trapper has several concerns regarding operations within his trapline area. Concerned with the amount of harvest impacting Marten habitat as well as fragmenting trapline area. Would like Canfor to not harvest Sx/Bl in the area for 20 to 30 years or partial cut in Sx types. Would also like us to remove bridges wherever possible to control access, maintain a 1km buffer along his cabin at the mouth of the Burnt river and keep him informed of proposed activities.	02-Sep-05	Canfor response is that we would look into buffering cabin and would keep him informed of Canfor's proposed harvest activities sending him a revised map of his trapping area. Access control would have to be discussed with the MOFR and Ministry of Environment. At this time Canfor will not commit to a harvest moratorium on any part of the trapline until the Mountain Pine Beetle infestation is complete but we would be targeting susceptible and infested stands in the short term. If he had specific concerns in proposed cutblocks we will evaluate each of those concerns individually.	09-Sep-05
ITS-CH2005-OP0009	Rancher would like to expand his cattle operation into lot 2233 (Part of TFL 48). He applied for this parcel under the Agricultural Lands Act and spent $ getting the lot surveyed. The lands department neglected to tell him that the land was already within the TFL. He talked to the MoFR and they told him he needed to deal with Canfor prior to them allowing the land to be removed from the TFL. Rancher is wondering what he is required to do to get Canfor's approval to remove land from the TFL.	06-Sep-05	Canfor was already asked about this issue from the Ministry via e-mail earlier this year and provided some comments. Canfor responded to MoFR Stewardship Forester identifying our concerns with the proposed removal. Canfor phoned the rancher and told him Canfor's concerns with the removal being land alienation, road allowance required to access area beyond the lot, irregular lot boundary and the difficulty identifying boundary in the future, loss of THLB within TFL. Information provided to MoFR concerning Merchantable Timber Volumes and THLB impacted. This info provided to Lands for subsequent decision.	08-Sep-05
ITS-CH2005-OP0010	Trapper complained that Canfor had potentially damaged his trapline because of a sort yard in Perry Creek. He was concerned that Canfor had not sent maps in the spring, which is generally the annual notification timeframe, and Canfor was actively harvesting in the area. Trapper was concerned about compensation for his traps that may have been destroyed in the construction of the sort yard.	16-Sep-05	Canfor has no new sort yard constructed in the area through the summer of 2005 and the Wolverine Mine is undertaking the only harvesting in the area. A contractor who also works for Canfor is doing the harvesting at the mine but not representing Canfor. Trapper should be contacting the Wolverine Mine for any potential compensation for damaged traps.	21-Sep-05
ITS-CH2005-OP0014	Request from Moberly Lake Community Association to attend an open house to present our proposed activities within the Moberly Lake Watershed areas and to provide input into a proposed watershed/land use plan for the Moberly watershed.	07-Nov-05	Informed Moberly Lake Community Association that Canfor would attend open house (Dec 7, 2005) and present SFMP objectives for water quality and quantity and provide overview of current approved development plan blocks within the Moberly Watershed.	25-Nov-05

REVISIONS:

No revisions are suggested for this indicator or objective.

2.52 DISTRIBUTION/ACCESS TO SFM PLAN, ANNUAL REPORTS AND AUDIT RESULTS

Indicator Statement	Target Statement
Distribution/access to SFM Plan, Annual Reports and Audit Results	All SFM plans, annual reports, and audit reports will be made available during open houses, on Canfor's website (http://www.canfor.com/sustainability/certification/csa.asp), others upon request and distributed to PAC members and advisors
SFM Objective: We will provide information to public and First Nations about forest ecosystem values and management.	

STATUS AND COMMENTS:

The SFM plan for TFL 48 is available on Canfor's website at the following location (http://www.canfor.com/sustainability/certification/csa.asp). Also included are copies of annual reports and summaries of the 3rd party external audits completed on TFL 48. Copies of the above have been circulated to members of the PAC and advisors as well.

The 2005 annual report is posted at essentially the same time as distribution to the Public Advisory Committee.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.53 SPATIAL FORECASTING AND ANALYSIS

Indicator Statement	Target Statement
Spatial forecasting and analysis models	We will use spatial forecasting and analysis models to develop strategic SFM analysis and rotation length plans for SFMP 4
SFM Objective: We will improve and apply knowledge of forest ecosystems, values and management.	

STATUS AND COMMENTS:

Canfor has chosen to use the Remsoft Spatial Planning System (Woodstock v3.2, Spatial Woodstock and Stanley v5) for the timber supply analysis completed in support of this SFM plan and the AAC determination.

REVISIONS:

No revisions are suggested for this indicator or objective.

2.54 CURRENCY OF VEGETATION RESOURCE INVENTORY

Indicator Statement	Target Statement
Currency of vegetation inventory	We will use up-to-date vegetation inventory
SFM Objective: We will improve and apply knowledge of forest ecosystems, values and management.	

STATUS AND COMMENTS:

Phase I for TFL 48 was completed in 2000 and Phase II including Net Volume Adjustment Factoring (NVAF) was completed in 2004. The VRI was updated to account for activities and depletion to the end of 2004 due to harvesting, road construction and uses by other industrial users. Ages, heights and volumes were projected to 2005. This is the information that formed the basis for the analysis of this SFM plan and the associated timber supply analysis.

Height, age, and net merchantable volume were adjusted as a result of the Phase II and NVAF sampling completed on TFL 48. TSR volume is defined as the net merchantable volume at the 12.5cm+ utilization level in lodgepole pine leading stands and the 17.5cm+ level in all other stands. After adjustment, the average height increased by 5%, age decreased by 7% and TSR volume increase by 34%. The TSR volume increased by 18% in the high priority sample areas (those mature areas most likely to contribute to the timber harvesting land base) (JS Thrower & Associates 2005).

REVISIONS:

No revisions are suggested for this indicator or objective.

APPENDIX 1: 2004 STATUS OF MP 3 INDICATORS NO LONGER TRACKED IN SFMP 4

Outlined below are the indicators from SFMP 3 that are no longer being tracked in SFMP 4. The indicators listed have will not have their status reported on for 2004 going forward. This has been reviewed with the Public Advisory Committee during the review of the matrix developed in support of SFMP 4.

Indicator	Target
Disease transmission from domestic sheep grazing activities.	No disease transmission from domestic sheep to wild sheep populations from domestic sheep use in Canfor activities.
2004 Status/Rationale for Discontinuing Indicator	
Canfor is no longer using sheep grazing as a tool. There has been no sheep grazing on TFL 48 since 2001.	

Indicator	Target
Protected area by seral stage	Identify seral stage distribution in Protected Areas within the TFL (e.g., Bocock, Butler, Ridge, Elephant Ridge/Gwillim, Kiln se za, Pine/Lemoray, Peace River/Boudreau).
2004 Status/Rationale for Discontinuing Indicator	
Status is captured in seral analysis (3.3) already and CFP has no management control over this with the exception of no harvesting or road building in protected areas. The current status is captured in the following table (Table 25).	

Table 25: Status of Seral Stages within Protected Areas for 2000 and 2005

		Seral Stage of Vegetated Treed Areas								
		2000 Status				2005 Status				Total Area
Protected Area	BEC	Early	Juvenile	Mature	Old	Early	Juvenile	Mature	Old	
Bocock Peak	ESSF wc3	-	91	317	29	-	79	328	30	437
	ESSF wk2	-	22	91	81	-	22	91	81	194
Bocock Peak Total		-	113	408	110	-	101	419	111	631
Butler Ridge	BWBS mw1 C	3	128	480	98	3	128	480	98	709
	BWBS mw1 D	179	322	64	461	105	389	71	461	1,026
	BWBS wk2 C	-	156	279	21	-	156	279	21	456
	BWBS wk2 D	-	103	15	74	-	219	43	74	192
	ESSF mv4	60	2,362	218	-	60	2,352	228	-	2,640
Butler Ridge Total		242	3,071	1,056	654	168	3,244	1,101	654	5,023
Gwillim Lake	BWBS mw1 C	-	-	22	4	-	-	20	6	26
	BWBS mw1 D	-	-	-	5	-	-	-	5	5
	BWBS wk1 C	-	193	304	126	-	174	310	139	623
	BWBS wk1 D	11	27	52	27	11	13	65	28	117
	ESSF mv2	7	880	660	94	7	784	756	94	1,641
Gwillim Lake Total		18	1,100	1,038	256	18	971	1,151	272	2,412
Klin se za	ESSF wc3	-	219	761	70	-	191	787	72	1,050
	ESSF wk2	-	8	32	28	-	8	32	28	68
Klin se za Total		-	227	793	98	-	199	819	100	1,118
Peace Boudreau	BWBS mw1 C	-	301	97	22	-	301	97	22	420
	BWBS mw1 D	-	1,190	442	47	-	1,190	442	47	1,679
Peace Boudreau Total		-	1,491	539	69	-	1,491	539	69	2,099
Pine – Lemoray	ESSF wc3	-	445	1,278	261	-	349	1,316	319	1,984
	ESSF wk2	-	136	135	142	-	134	77	202	413
	SBS wk2	-	54	-	-	-	1	53	-	54
Pine – Lemoray Total		-	635	1,413	403	-	484	1,446	521	2,451
Grand Total		**260**	**6,637**	**5,247**	**1,590**	**186**	**6,490**	**5,475**	**1,727**	**13,734**

Indicator	Target
Minimum harvest age (as a surrogate for nutrient cycling).	Minimum harvest ages in years will be: Aspen 61, Cottonwood 61, Pine 81, Subalpine Fir 81, Spruce 121 (based on leading species and average stand age).
2004 Status/Rationale for Discontinuing Indicator	
Lack of science to accurately determine the threshold, long term site productivity is captured through site index (3.21). The following table (Table 26) shows the status in 2004. Blocks highlighted in yellow do not meet the target for this indicator, however all blocks are associated with expedited salvage to deal with MPB infestations.	

Table 26: Average Harvest Age for Proposed Blocks

Licence	Block	Area	Age	Sx	PL	BL	AT	ACT	EP
TFL 48	A0045	0.3	68	9%	69%	0%	22%	0%	0%
TFL 48	A0046	0.2	70	10%	66%	0%	24%	0%	0%
TFL 48	A0049	1.5	70	0%	70%	2%	0%	15%	0%
TFL 48	A0028	1.2	71	8%	83%	0%	9%	0%	0%
TFL 48	B0011	4.2	72	15%	63%	0%	17%	4%	0%
TFL 48	B0023	5.9	73	1%	86%	0%	13%	0%	0%
TFL 48	B0005	2.0	73	8%	70%	0%	21%	0%	0%
TFL 48	A0017	1.7	74	0%	18%	0%	82%	0%	0%
TFL 48	A0043	1.4	79	0%	100%	0%	0%	0%	0%
TFL 48	A0019	0.4	80	17%	0%	0%	66%	17%	0%
TFL 48	B0006	5.6	80	5%	1%	0%	94%	0%	0%
TFL 48	A0018	1.4	81	6%	1%	0%	93%	0%	0%
TFL 48	A0041	0.2	81	0%	100%	0%	0%	0%	0%
TFL 48	C0001	11.4	87	2%	76%	0%	21%	0%	0%
TFL 48	A0047	1.3	87	8%	91%	1%	0%	0%	0%
TFL 48	B0039	2.5	88	28%	58%	11%	3%	0%	0%
TFL 48	A0036	0.8	88	13%	83%	3%	0%	0%	0%
TFL 48	A0033	0.9	88	22%	22%	0%	5%	51%	0%
TFL 48	B0001	5.4	89	1%	65%	0%	31%	2%	1%
TFL 48	B0012	5.3	89	4%	67%	0%	11%	18%	0%
TFL 48	B0015	6.4	89	10%	87%	2%	2%	0%	0%
TFL 48	B0025	6.5	90	0%	93%	0%	1%	6%	0%
TFL 48	A0025	0.5	90	25%	71%	4%	0%	0%	0%
TFL 48	A0035	0.6	90	6%	90%	1%	3%	0%	0%
TFL 48	B0026	5.5	90	1%	58%	0%	25%	16%	0%
TFL 48	C0002	9.8	91	4%	7%	0%	89%	0%	0%
TFL 48	B0024	2.4	91	2%	34%	0%	52%	1%	12%
TFL 48	A0002	0.9	91	0%	0%	0%	69%	25%	5%
TFL 48	A0008	0.3	91	4%	79%	0%	15%	0%	2%
TFL 48	A0009	1.1	91	1%	62%	0%	35%	0%	2%
TFL 48	A0013	0.6	91	5%	85%	0%	8%	0%	2%
TFL 48	A0014	1.1	91	0%	62%	0%	36%	0%	2%
TFL 48	A0020	0.4	91	13%	79%	7%	0%	1%	0%
TFL 48	A0021	0.3	91	22%	78%	0%	0%	0%	0%
TFL 48	A0022	1.7	91	20%	71%	5%	4%	0%	0%
TFL 48	A0026	0.5	91	7%	92%	0%	0%	1%	0%
TFL 48	A0027	0.5	91	6%	26%	0%	69%	0%	0%
TFL 48	B0008	3.7	91	26%	67%	0%	7%	1%	0%
TFL 48	B0028	5.7	91	40%	39%	11%	7%	4%	0%
TFL 48	B0040	4.3	91	8%	91%	0%	0%	0%	0%
TFL 48	B0010	3.9	91	9%	91%	0%	0%	0%	0%
TFL 48	A0012	1.8	91	5%	85%	0%	8%	0%	2%
TFL 48	A0031	1.1	91	11%	39%	0%	18%	32%	0%
TFL 48	B0009	4.5	91	18%	77%	2%	3%	0%	0%
TFL 48	B0041	3.4	91	7%	92%	0%	0%	1%	0%

Licence	Block	Area	Age	Sx	PL	BL	AT	ACT	EP
TFL 48	A0029	5.8	91	4%	79%	0%	8%	10%	0%
TFL 48	A0023	0.8	91	17%	75%	3%	5%	0%	0%
TFL 48	A0007	0.7	91	1%	71%	0%	27%	0%	2%
TFL 48	C0005	13.7	91	14%	79%	1%	5%	1%	0%
TFL 48	B0002	6.0	92	0%	84%	0%	14%	0%	2%
TFL 48	T5015	184.6	92	16%	66%	3%	9%	7%	0%
TFL 48	A0011	0.9	92	0%	83%	0%	15%	0%	2%
TFL 48	A0058	0.1	92	56%	11%	33%	0%	0%	0%
TFL 48	B0038	6.0	92	14%	76%	0%	7%	3%	0%
TFL 48	C0010	8.8	92	4%	83%	0%	11%	2%	0%
TFL 48	T4083	122.9	92	9%	85%	1%	2%	3%	0%
TFL 48	A0037	1.0	93	10%	89%	1%	0%	0%	0%
TFL 48	C0013	7.3	93	7%	76%	0%	18%	0%	0%
TFL 48	A0015	1.3	93	0%	100%	0%	0%	0%	0%
TFL 48	B0035	2.1	93	10%	84%	0%	6%	0%	0%
TFL 48	B0027	2.7	93	5%	89%	0%	0%	6%	0%
TFL 48	T4080	188.1	93	27%	60%	4%	7%	3%	0%
TFL 48	T5016	411.3	94	17%	75%	2%	4%	1%	0%
TFL 48	A0024	1.1	94	25%	52%	10%	13%	0%	0%
TFL 48	B0014	2.7	94	6%	17%	0%	73%	4%	0%
TFL 48	A0034	1.1	94	1%	80%	0%	18%	1%	0%
TFL 48	T5026	134.9	94	38%	46%	13%	2%	0%	0%
TFL 48	C0006	14.5	95	11%	85%	3%	1%	0%	0%
TFL 48	B0007	6.4	95	26%	63%	9%	0%	2%	0%
TFL 48	A0032	1.1	95	2%	18%	0%	51%	28%	0%
TFL 48	T4082	227.5	96	28%	62%	4%	3%	3%	0%
TFL 48	T4095	58.2	96	65%	19%	15%	1%	0%	0%
TFL 48	A0003	1.1	96	0%	19%	0%	54%	18%	10%
TFL 48	B0004	5.5	96	0%	74%	0%	25%	1%	0%
TFL 48	T4096	187.0	96	46%	44%	4%	1%	5%	0%
TFL 48	A0050	0.2	97	0%	96%	0%	4%	0%	0%
TFL 48	A0057	0.7	97	0%	96%	0%	4%	0%	0%
TFL 48	B0037	1.6	97	5%	87%	2%	6%	0%	0%
TFL 48	A0004	1.3	98	1%	37%	0%	42%	15%	5%
TFL 48	A0055	0.7	98	18%	72%	0%	5%	5%	0%
TFL 48	T5025	130.7	98	20%	67%	10%	3%	0%	0%
TFL 48	T4094	43.9	99	61%	27%	6%	1%	5%	0%
TFL 48	T5017	322.1	100	13%	74%	2%	8%	4%	0%
TFL 48	B0013	4.1	100	0%	94%	0%	0%	6%	0%
TFL 48	T4092	49.0	100	50%	38%	3%	1%	8%	0%
TFL 48	A0001	1.1	100	3%	57%	0%	28%	8%	5%
TFL 48	C0009	9.6	101	11%	65%	1%	22%	0%	0%
TFL 48	B0016	6.9	102	23%	69%	9%	0%	0%	0%
TFL 48	B0036	7.0	104	7%	84%	2%	7%	0%	0%
TFL 48	B0033	2.7	104	6%	94%	0%	0%	0%	0%
TFL 48	B0034	2.0	104	12%	82%	0%	6%	0%	0%
TFL 48	A0056	0.5	105	0%	90%	0%	10%	0%	0%
TFL 48	B0003	3.4	105	18%	66%	0%	16%	0%	0%
TFL 48	A0053	0.1	105	0%	96%	0%	4%	0%	0%
TFL 48	T5018	140.4	105	22%	67%	1%	8%	1%	0%
TFL 48	A0054	0.8	105	2%	76%	0%	7%	15%	0%
TFL 48	A0010	0.8	106	2%	91%	0%	3%	4%	0%
TFL 48	T4093	31.4	106	63%	26%	2%	1%	8%	0%
TFL 48	T4098	227.6	106	41%	39%	9%	2%	7%	3%
TFL 48	A0051	0.6	107	0%	96%	0%	4%	0%	0%
TFL 48	A0052	0.1	107	0%	92%	0%	8%	0%	0%
TFL 48	A0006	1.1	107	1%	76%	0%	20%	3%	0%
TFL 48	C0012	11.7	108	19%	57%	0%	21%	3%	0%
TFL 48	A0005	1.4	109	0%	52%	0%	47%	0%	0%

Licence	Block	Area	Age	Sx	PL	BL	AT	ACT	EP
TFL 48	A0016	1.0	109	0%	50%	0%	50%	0%	0%
TFL 48	T4016	35.5	109	38%	49%	13%	0%	0%	0%
TFL 48	C0003	8.2	110	1%	67%	0%	32%	0%	0%
TFL 48	T4089	97.8	110	57%	31%	5%	1%	6%	0%
TFL 48	T4097	186.1	110	38%	52%	4%	0%	6%	0%
TFL 48	T5023	297.2	111	38%	51%	6%	2%	2%	0%
TFL 48	T4017	97.3	112	37%	53%	4%	3%	3%	0%
TFL 48	T4091	24.4	112	33%	56%	6%	2%	3%	0%
TFL 48	T5022	159.2	113	28%	58%	9%	4%	1%	0%
TFL 48	T5019	54.9	115	26%	65%	6%	3%	1%	0%
TFL 48	A0048	1.6	115	3%	70%	4%	24%	0%	0%
TFL 48	T5024	49.4	120	25%	63%	5%	6%	1%	0%
TFL 48	B0029	3.2	123	38%	58%	0%	4%	0%	0%
TFL 48	T4109	173.5	124	26%	72%	1%	0%	1%	0%
TFL 48	T4107	221.1	126	32%	65%	1%	1%	1%	0%
TFL 48	T4108	126.2	127	25%	73%	0%	0%	2%	0%
TFL 48	T4090	108.7	128	54%	30%	16%	0%	0%	0%
TFL 48	T5021	52.1	128	17%	64%	2%	16%	1%	0%
TFL 48	C0008	12.7	131	11%	75%	5%	8%	0%	0%
TFL 48	A0044	1.4	136	39%	54%	7%	0%	0%	0%
TFL 48	B0017	3.6	139	34%	66%	0%	0%	0%	0%
TFL 48	B0021	2.8	139	22%	71%	0%	7%	0%	0%
TFL 48	T4099	55.4	140	30%	58%	12%	0%	0%	0%
TFL 48	B0022	2.3	142	24%	71%	0%	4%	0%	0%
TFL 48	T4084	32.7	143	55%	23%	11%	3%	9%	0%
TFL 48	T4106	18.7	145	37%	58%	2%	0%	3%	0%
TFL 48	T4103	62.1	146	32%	67%	1%	0%	0%	0%
TFL 48	C0011	8.2	147	10%	79%	0%	12%	0%	0%
TFL 48	T4079	126.4	147	17%	81%	2%	0%	0%	0%
TFL 48	T4088	149.7	147	64%	23%	8%	3%	1%	0%
TFL 48	B0020	4.9	148	13%	87%	0%	1%	0%	0%
TFL 48	C0004	8.8	148	18%	64%	3%	0%	16%	0%
TFL 48	A0042	1.4	152	10%	90%	0%	0%	0%	0%
TFL 48	T4105	47.3	153	35%	47%	18%	0%	0%	0%
TFL 48	T4102	84.7	160	50%	39%	10%	0%	0%	0%
TFL 48	T4101	42.0	161	53%	27%	20%	0%	0%	0%
TFL 48	B0031	6.9	163	64%	18%	0%	0%	18%	0%
TFL 48	C0007	8.1	167	52%	18%	13%	18%	0%	0%
TFL 48	B0019	5.5	168	10%	90%	0%	0%	0%	0%
TFL 48	B0030	3.9	172	19%	81%	0%	0%	0%	0%
TFL 48	B0032	7.1	175	29%	61%	10%	0%	0%	0%
TFL 48	T4104	15.0	175	61%	22%	13%	0%	4%	0%
TFL 48	T4100	5.7	176	52%	29%	19%	0%	0%	0%
TFL 48	A0030	0.7	178	60%	10%	30%	0%	0%	0%
TFL 48	B0018	1.7	183	0%	100%	0%	0%	0%	0%
TFL 48	A0059	0.8	186	20%	72%	9%	0%	0%	0%
TFL 48	A0060	0.1	186	20%	72%	9%	0%	0%	0%
TFL 48	T5020	39.3	190	46%	42%	8%	5%	0%	0%
TFL 48	A0039	1.3	218	12%	82%	7%	0%	0%	0%
TFL 48	A0040	1.0	220	25%	72%	3%	0%	0%	0%
TFL 48	A0038	0.6	220	8%	85%	7%	0%	0%	0%

Indicator	Target
Old Growth Management Areas	We will sustain old growth habitat values within the TFL.
2004 Status/Rationale for Discontinuing Indicator	
Sufficiently covered by seral stage targets (3.3) and mature patch size targets (3.4). As this indicator has been discontinued no additional reporting is required.	

Indicator	Target
Habitat Connectivity	Maintain an adequate level of habitat connectivity at landscape and stand levels with an emphasis on species dependant on mature forest or forest types (e.g., caribou and marten) recognizing that habitat connectivity may shift across the landscape.
2004 Status/Rationale for Discontinuing Indicator	
There is no new information to present on this indicator prior to discontinuance. Sufficiently covered by seral stage targets (3.3), mature patch size targets (3.4) and Species of Management Concern (3.11). Full spatial modelling helps to guide management and needs for inclusion in 3.11. Species-specific needs for Habitat Connectivity will be addressed in 3.11 if required.	

Indicator	Target
Average investment in new technology, capital maintenance and construction at Canfor operations in Chetwynd.	We will invest $2.5 million annually, based on 10 year rolling average, in new technology, capital maintenance and construction.
2004 Status/Rationale for Discontinuing Indicator	
The current status for this indicator is shown below in Table 27. The certification is for management of the DFA not the mill. Canfor would be pleased to provide information about investments in the mill to the PAC but feel that there are other suitable indicators relevant to the management of the DFA that are included in SFMP 4 (ie. 3.41, 3.42)	

Table 27: Average Annual Investment

10 Year Period (Rolling)	Average Annual Investment
1990-1999	$4.0 MM
1991-2000	$4.3 MM
1992-2001	$4.4 MM
1993-2002	$4.4 MM
1994-2003	$4.3 MM
1995-2004	$3.6 MM

Indicator	Target
Pro-active consultation process for significant activities such as proposed timber harvesting.	Forest Development Plan to be referred to Saulteau and West Moberly First Nations.
2004 Status/Rationale for Discontinuing Indicator	
There was a major amendment to the FDP completed in 2004 for TFL 48. This amendment was referred to Saulteau First Nation, West Moberly First Nation, McLeod Lake Indian Band, Halfway River First Nation and Lheidli T'enneh First Nation. Difficult to measure success and intent captured with indicator 3.45 and 3.46.	

Indicator	Target
Archaeological impact assessments on proposed harvest blocks.	We will conduct archaeological impact assessments as indicated through archaeological overviews or inventory.
2004 Status/Rationale for Discontinuing Indicator	
In 2004 there was one AIA completed on block T4007 and the access road to the block. No archaeological concerns were noted during the assessment and as a result no special actions are required. Intent captured in Indicator 3.45 and indicator written to ensure that Canfor's actions are consistent with findings and resulting operational plans.	

Indicator	Target
Aboriginal Liaison	We will increase the level of aboriginal input to forest management by meeting with Band councils, representatives, contractors, and/or individuals as issues and opportunities arise.
2004 Status/Rationale for Discontinuing Indicator	
The following table summarizes the number of meetings held with First Nations. A meeting was held on March 17, 2004 with Saulteau First Nations (SFN) to discuss proposed brushing treatment on Gauthier trapline (722T004). One formal meeting was held with Saulteau First Nations (SFN) and West Moberly First Nations (WMFN) on May 26th, 2004 regarding the 2004 Notification of Intent to Treat (NIT). On May 25, 2004, Canfor took Teena Demeulemeester and Oliver Gauthier to CP 610-2, 633-3 and 633-5 to discuss proposed brushing treatments in these blocks. Difficult to measure success and intent captured with Indicator 3.45 and 3.46.	

Table 28: Meetings Held with First Nations

First Nation	1999	2000	2001	2002	2003	2004
Saulteau	1	1*	3	3	1	3
West Moberly	2	1	4	1	0	1
McLeod Lake Indian Band	N/A	N/A	N/A	2	0	0

* Chief and Council did not attend a meeting on Nov. 30, 2000 but trappers from Saulteau did.

Indicator	Target
Aboriginal employment	We will budget $100,000 annually for aboriginal contractors.
2004 Status/Rationale for Discontinuing Indicator	
In 2004 Canfor paid $550,394 to First Nation contractors. Canfor feels that this is best dealt with as specific business opportunities for the whole Peace operations not specifically for the TFL (demonstrated with Joint Venture Licences with West Moberly First Nation (Dunne-Za) in both Dawson Creek TSA and Ft St John TSA).	